

American Gas *Association* MONTHLY

Tulsa Natural Gas Headliners

Scientific Approach to Sales

Today's Gas Servicing Trends

Regulation of Gas Accounting

Gas Court of Flame Dedicated



May

1939

VOLUME XXI NUMBER 5

NEW SUPER-SPEED **GAS** RANGES MAKE *COOKING FASTER THAN EVER BEFORE*



GIANT SPEED BURNER

DOUBLE-QUICK BROILING

NEW FAST HEATING OVEN

MODERN GAS RANGES

have many wonderful time- and work-saving features. Every housewife should have the benefit of these advantages—you're missing something without them.

CLICK SIMMER BURNER—Low economy flame with "click" signal for waterless cooking

AUTOMATIC LIGHTING—No matches to strike—No waiting—Instant heat.

GIANT BURNER—For fastest top-stove cooking. Wide heat spread for large utensils.

NEW TYPE TOP BURNERS—Direct flame toward bottom of utensils—save gas—won't clog.

SMOKELESS SPEED BROILER—Perforated grill keeps fat from flame. Eliminates smoke.

HEAT CONTROL—Assures exact oven temperature. No more "guess-work" baking.

BALL-BEARING ROLLERS—Finger-tip control on broiler and utensil compartments.

FAST PRE-HEATING OVEN—Reaches maximum oven heat in fraction of time required by ordinary ranges.

SLOW-ROASTING OVEN—Holds minimum heat for "low temperature" cooking. Temperature will not creep up.

NOW CHECK THE FEATURES

**YOU HAVE
ON YOUR PRESENT RANGE!**

SUPER-SPEED—that's why up-to-date housewives who want to make every minute count are choosing these "Fast Workers" for their kitchens.

In addition to the faster operation of the burners, the amazing *automatic* features of these modern Gas Ranges cut kitchen time. A signal lets you know when the oven is ready—and when the baking time is over. There's no need to be a "pot watcher" with the economical simmer burner. Vegetables cook gently

without danger of them scorching.

Remember, too, that Gas is *fast*, dependable, thrifty—and the *flexible* Gas flame offers you limitless gradations of heat to increase your cooking skill.

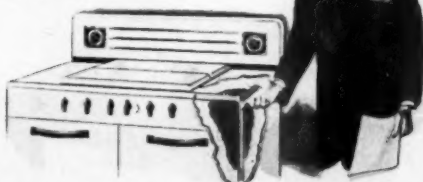
These smart, modern Gas Ranges are so easy to *keep clean*. Do look them over at your Gas Company showroom or Appliance Dealers. When you find out what they can do, you, too, will want to "go modern" with a new Gas Range!

AMERICAN GAS ASSOCIATION



THIS BLANKET KEEPS YOU COOL! It's a heavy insulation which holds oven heat in. It makes summer cooking more comfortable. And saves gas in the bargain.

THE "FOCUSED FLAME" of newly designed top burners directs heat toward bottom of utensils—where it belongs. Heat isn't wasted up the sides of saucepans. Kitchens are cooler—gas is saved.



THIS SEAL represents the latest developments in cooking equipment. It stands for 22 super-performance standards established by the American Gas Association. Leading gas range manufacturers are now making de luxe ranges that include all 22 features. Such ranges are identified by the CP Seal which signifies "Certified Performance." Every modern Gas Range meets many of these standards. There is a size and model to fit every home requirement—every pocketbook!



LET GAS DO THE **4** BIG JOBS • COOKING • WATER HEATING • REFRIGERATION • HOUSE HEATING



CONTENTS FOR MAY 1939



The voices of experience will be heard in Tulsa this month and a wealth of information is bound to result from this conclave of experts on the natural gas industry. And if you don't believe it's a great industry just take a look at the figures. . . . In this issue, Mr. Perry takes up the serviceman's troubles and clarifies the picture. He views them as far more complicated than a few years ago and a pressing problem of the moment. . . . How many of our customers know that gas is so versatile that it plays a part in almost every move we make in our every day life? Mr. Rainey tells a romantic and interesting story which sounds like a fairy tale—but isn't. . . . More contributions to the science of selling, four of them this time, give a more complete picture of the sales policies of the industry. . . . Perhaps the most fruitful of the fine papers presented at the Spring Accounting Conference is that on accounting practice and regulation of public utilities by Nelson Lee Smith. It contains much food for thought. . . . H. Carl Wolf, of Atlanta, makes some pertinent observations on gas refrigerator promotion—very much to the point.

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SUBSCRIPTION • \$3.00 A YEAR

Published eleven times a year by the American Gas Association, Inc. Publication Office, American Building, Brattleboro, Vt. Publication is monthly except July and August which will be a bi-monthly issue. Editorial Offices, 420 Lexington Avenue, New York, N. Y. Address all communications to American Building, Brattleboro, Vermont, or to 420 Lexington Ave., New York, N. Y. All manuscript copy for publication should be sent to the editorial offices in



New York. The Association does not hold itself responsible for statements and opinions contained in papers and discussions appearing herein. Entered as Second Class Matter at the Post Office at Brattleboro, Vermont, February 10th, 1922, under the Act of March 3, 1879.

Cable Addresses: American Gas Association
AMERIGAS, NEW YORK
American Gas Association Testing Laboratories
AMERGASLAB, CLEVELAND



Entrance to the Court of Flame
at the New York World's Fair



JAMES M. BEALL, *Editor*

NATURAL GAS TRENDS

.... The Development of a Major Industry

THE voices of the ablest men in the natural gas industry will be heard in Tulsa, Oklahoma, May 8-11 at the annual convention of the Natural Gas Section. They will be making their contribution to the progress of a vital and rapidly expanding industry.

Some idea of the magnitude and significance of the natural gas industry may be obtained from the following information gathered by the Association's statistical department.

Today, towns and cities with a population of more than 32,814,000 people have available the innumerable conveniences afforded by natural gas. Approximately 66,000 people are employed by the natural gas companies at an annual payroll in excess of \$98,156,000.

Surprising as it may seem, the investment in the natural gas industry is more than double the amount of capital employed in the production of automobiles. It takes \$2,700,000,000 to provide natural gas service to 7,220,000 customers, as compared with \$1,369,631,000 which have been invested in the automobile industry. The average worker in the natural gas industry has behind him the tremendous investment of \$41,000. This compares with \$3,000 in the automobile industry, \$7,000 in the steel industry, and \$24,000 in the railroad industry.

An interesting sidelight on the contribution of the industry toward improved living conditions for workers is the wage and hour trend. In the peak year 1929, the average employee in the natural gas industry worked 49 hours per week; by 1937 this had been reduced to 40 hours per week, and yet his average weekly earnings for the 40-hour week were nearly 9 per cent higher than in 1929.

One of the outstanding developments in the natural gas industry during the past decade and a half has been the expansion into territories and markets formerly served with manufactured gas.

In 1937 there were some 84 former manufactured gas companies distributing straight natural gas of approximately 1,000 B.t.u. to 1,991,911 customers who purchased 154,099,849 M cubic feet of natural gas or 1,540,998,490 therms, for which they paid \$89,598,353, an average rate of 5.8¢ per therm.

In 1923 these same companies were distributing manufactured gas of about 530 B.t.u. to 1,412,662 customers who purchased 60,458,813 M cubic feet of manufactured gas or 320,431,700 therms, for which they paid \$58,028,262, an average of 18.1¢ per therm.

In addition there were in 1937, 28 former manufactured gas companies serving mixed gas of approximately 840 B.t.u. to 1,771,841 customers who purchased 60,800,039 M cubic feet of mixed gas or 510,720,328 therms for which they paid \$66,489,987, an average rate of 13¢ per therm.

In 1923 this same group of companies sold manufactured gas of approximately 530 B.t.u. to 1,429,813 customers who purchased 63,459,320 M cubic feet of manufactured gas or 336,334,396 therms, for which they paid \$59,803,023, an average rate of 17.8¢ per therm. In other words, the number of consumers actually using gas in 1937, had they paid the rates of 18.1¢ and 17.8¢, respectively, in force in 1923, would have had to pay \$124,260,500 more for the equivalent service in 1937 alone.

In the fifteen-year interval from 1923 to 1937, manufactured gas has been replaced by natural gas or mixed natural and manufactured gas in communities with a population of nearly 19,800,000 people, and approximately 3,764,000 customers have been affected by the change. During this same period natural gas has been made available to over 2,300,000 customers who had not previously been served with any gas fuel.

Natural Gas Convention Headliners



T. R. Weymouth

As chairman of the Natural Gas Section of the American Gas Association, Mr. Weymouth will play a major role in the Convention Sessions. His address on the "Activities of the Natural Gas Industry" at the opening general session, Tuesday, May 9, will review the industry's accomplishments during the year and set the keynote of the convention. He is vice-president in charge of operations for the Columbia Gas and Electric Corporation, author of the Weymouth Formula for flow of gas in pipe lines, and inventor of fluid measuring devices.



Conrad N. Lauer

Mr. Lauer is president of the American Gas Association and president of The Philadelphia Gas Works Co., Philadelphia. He will deliver an address entitled "A Mobilized Industry" at the opening general session, Tuesday, May 9. Mr. Lauer was elected president of the Philadelphia company in 1929. Subsequently he was elected a member of the Philadelphia Municipal Gas Works Commission and vice-president of the United Gas Improvement Company.

A well-known leader in the natural gas industry, Mr. Schmidt is vice-chairman of the Natural Gas Section. While with the Ohio Fuel Supply Co., Columbus, in the gas measurement department, he aided materially in developing the orifice meter mercury differential and the gas density balance used today in determining specific gravity of natural gas.



Elmer F. Schmidt

In 1918 Mr. Schmidt took charge of gas measurement for the Lone Star Gas Company, Dallas, Texas, became that company's chief engineer a year later and in 1920 was appointed general superintendent. Today he is vice-president of the company.



Frank R. Denton

Mr. Denton will be the principal speaker at the luncheon following the general session, Tuesday, May 9. As president of the Mellon Securities Corporation, Pittsburgh, Pa., he will speak authoritatively on gas and oil securities. His experience includes being appointed chief national bank examiner in Washington, D. C., in 1929.



James W. Cowles

Cooperation on problems of mutual interest to the natural gas industry and natural gasoline manufacturers will be discussed Monday morning, May 8, by James W. Cowles, manager of the gas department of the Shell Petroleum Corp., Tulsa, Oklahoma. A pioneer Oklahoman, he is nationally known as a gas contract authority and was the 1938 winner of the Hanlon Award presented each year for distinctive service in advancing the interests, standards and technical procedure of the natural gasoline industry.

Mr. Taylor will speak on management's responsibilities at the management symposium Tuesday, May 9. A background of utility experience and eight years as city manager of Grand Haven, Mich., where he directed the rebuilding and operation of the electric and water utilities of the city, makes him well qualified to discuss this subject. He is a vice-president of Stone & Webster Service Corporation, New York, N. Y.



Paul R. Taylor



H. C. Cooper

Distinguished work as chairman of the Main Technical and Research Committee of the Natural Gas Section and his leadership in the solution of engineering problems, won for Mr. Cooper the 1938 Charles A. Munroe Award. Mr. Cooper will again lead the session devoted to the work of the research committee which takes place Wednesday, May 10. A powerful factor in the development of the natural gas industry, he played a leading role in the building of long-distance oil and gas pipe lines. He announced his retirement as president of the Hope Natural Gas Co. and affiliated companies on February 20.



A. W. Ambrose

Mr. Ambrose will take part in the management symposium on Tuesday, May 9, discussing the subject, "Engineering Assistance to Management." He was formerly chief technologist for the U. S. Bureau of Mines in Washington, D. C. Since 1923, he has been associated with various subsidiaries of the Cities Service Oil Company, and is now vice-president and assistant general manager in Bartlesville.

"Financing the Dealer," one of the most important merchandising problems facing the gas industry, will be discussed on Monday, May 8, from the banker's viewpoint by Percy M. Hall, vice-president, Manufacturers Trust Company, New York, N. Y. He has a background of extensive experience in the finance business. He organized and developed the Industrial Credit Division of the Manufacturers Trust Company.



Percy M. Hall

Meet in Tulsa, Oklahoma, May 8-11



N. C. McGowen

Mr. McGowen, who is president of the United Gas Pipe Line Company of Houston, Texas, and immediate past president of the American Gas Association, will present the Gas Well Deliveries Subcommittee report on Wednesday, May 10. He has been prominent in the natural gas industry in the southwest for many years and has an enviable record as a producer of natural gas and as a business man. The development of the natural gas fields in Louisiana was due to a great extent to his energy and effort. He was the first chairman of the Natural Gas Department of the Association.

Mr. Beckjord is a vice-president of the American Gas Association and vice-president and general manager of the Columbia Gas & Electric Corp., New York. An outstanding executive in the gas industry for many years he will speak on the subject of "Management Views the Growing Industrial Gas Load" on Monday, May 8. Prior to joining the Columbia Gas & Electric Corp., Mr. Beckjord was vice-president and general manager of the Boston Consolidated Gas Company. He has been a director of the Association and chairman of both the Technical and Commercial Sections.



Walter C. Beckjord

A familiar figure on natural gas convention programs, Dr. Finch, director of the United States Bureau of Mines, on Thursday, May 11, will describe the cooperative research work carried on by the Bureau and the Natural Gas Section of the Association. Dr. Finch has a distinguished background in the fields of mining and geology.



Dr. Finch

A timely and authoritative discussion of "Business Relationship with Government" by Baird H. Markham will be presented at the Tuesday general session, May 9. Since 1933 Mr. Markham has been director of the American Petroleum Industries Committee with offices in New York.



Baird H. Markham

"Fifty Years of Regulation of Business" will be reviewed Thursday, May 11, by George E. Frazer, counsel for the Association of Gas Appliance and Equipment Manufacturers, New York, and a member of the law firm of Frazer and Torbet, of New York and Chicago.



George E. Frazer

Mr. Flanagan speaks on "The Place of the Safety Department in the Organization Set-Up," on May 11. He is assistant to the president of United Gas Pipe Line Company and is an expert on safety problems, being in charge of the safety department of his company as well as insurance and other general departments.



J. C. Flanagan



E. R. Guyer

"It's Only the Beginning" is the title of Mr. Guyer's address to be presented at the general session, Wednesday, May 10. He is president of the Association of Gas Appliance and Equipment Manufacturers and vice-president of Cribben & Sexton Company, Chicago. As official leader of the manufacturers, and an important executive in the industry, his remarks bear especial significance.

P. McDonald Biddison, who will speak on "Fair Value and Fair Return" at the Wednesday general session, has had varied experience in this country and Mexico with supply, oil, coal and natural gas companies. He is now a consulting engineer in Dallas, Texas, occupied largely with the valuation of properties and rate cases on natural gas utilities. In 1917-1918, he conducted a search for helium in all natural gas fields in the United States and supervised construction of two helium plants in Texas.



P. McD. Biddison

The creed of Harry Swenson, director of displays for The Peoples Gas Light and Coke Company, Chicago, is "A Show Will Let Them Know." At least, that is the title of his part of the convention program on May 8. In his more than ten years with the Chicago company, he has become a national authority on displays and kitchen and basement planning.

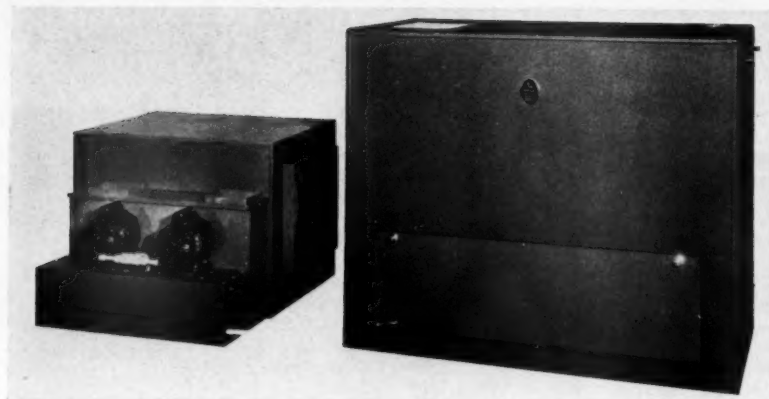


Harry Swenson



W. A. Dougherty

The timely subject of "Recent Court Decisions and Commission Rulings and Their Effect on the Natural Gas Industry" will be presented to the convention by William A. Dougherty on Wednesday, May 10. His work in the law department of the Standard Oil Company (New Jersey) has brought him in close contact with the natural gas industry in connection with the Public Utility Holding Company Act and with the Natural Gas Act.



Relative sizes of new (left) and old Silica Gel gas dehumidifiers are shown in the photograph. For the same capacities, the new rotating machines are greatly reduced in size

Association's Executives Inspect New Gas Air Conditioning Equipment

IMMEDIATELY following a two-day Conference on Industrial Gas Sales of the American Gas Association in Cleveland, Ohio, on March 29 various groups of gas industry officials, including members of the Association's Executive Board, the Committee of Executives on Air Conditioning headed by Walter C. Beckjord, and the Industrial and Commercial Air Conditioning Committee under the chairmanship of Charles R. Bellamy, were shown the latest developments in Silica Gel gas-operated dehumidifying equipment at The Bryant Heater Company's laboratories.

The new dehumidifier was demonstrated in a large closed room, into which live steam and heat were released until instruments indicated the room atmosphere to have reached 95° F. temperature and 135 grains of moisture per pound of air. The new unit was then started; and, in less than 20 minutes with approximately 50 people present in the room, the moisture was reduced to 50 grains per pound and the temperature to 72° F.

Lyle C. Harvey, president of The Bryant Heater Company, and C. F. Cushing, manager of air conditioning sales, conducted the demonstration and explained with a series of charts the economics and mechanics of the new machine and its wide applications.

Cooling was accomplished by the evaporation of water into the dry air produced by the dehumidifier. This partial resaturation was effected in a new resaturating spray cooler recently developed by Bryant concurrently with their new dry air machine. This resaturation, of course, is not sufficient in extent to impair the requisite drying effect. Furthermore, independent control of humidity and temperature is still provided.

Present plans contemplate the production of these new dehumidifiers in three sizes: 600, 1300 and 2700 cubic feet per minute capacity. The new design of the

equipment is quite simple, but startlingly different in that the silica gel adsorbent material is carried in a cylindrical basket that turns continuously. Both the conditioned air and heated air streams are continuous and simultaneous in flow. Dividing seals inside the cylinder separate these two air streams.

By being able to produce these new dehumidifiers at greatly reduced cost (approximately $\frac{1}{2}$ that of previous models) and applying thereto the well known principle of resaturation cooling, Bryant presented to the gas industry a means of not only dehumidifying but of cooling air. Thus for the first time the air conditioning industry is provided with competitively priced dehumidifying and cooling equipment which takes full advantage of low cost gas energy.

Sales Plan Studied

Following inspection of the Bryant equipment, Mr. Beckjord's Committee of Executives on Air Conditioning held a meeting at which it was pointed out that gas summer air conditioning has now reached the stage where emphasis must be placed on sales. The committee unanimously agreed to instruct the Industrial and Commercial Air Conditioning Committee to prepare a general industry sales plan for summer air conditioning.

In addition to Mr. Beckjord, the following committee members were present: Frank H. Adams, W. F. Friend, Mr. Harvey, Conrad N. Lauer, George F. Mitchell, Marcy L. Sperry and Eugene D. Milener. By special invitation the following were also present: Mr. Bellamy, R. M. Conner, C. F. Cushing, Merrill N. Davis, Davis M. DeBard, F. S. Dewey, L. B. Eichengreen, Alexander Forward, C. E. Gallagher, F. M. Goodwin, K. C. Long, H. N. Mallon, N. C. McGowen, Leon Oorusoff, Clifford E. Paige, N. T. Sellman, Frank H. Tremblay, Jr., and T. R. Weymouth.

The Committee on Industrial and Commercial Air Conditioning had previously met in the morning with Chairman Bellamy presiding. Present were: L. Oorusoff, vice-chairman, James C. Patterson, vice-chairman, F. R. Bichowsky, K. B. Castle, Jr., W. F. Friend, F. M. Johnson, E. P. Kramer and Mr. Milener.

Housing Group Specifies A. G. A. Approval

AVICTORY for gas appliances bearing Approval Seal of the American Gas Association's Testing Laboratories is seen in the new specifications of the Federal Housing Administration covering the installation of gas appliances in housing projects. These specifications make it mandatory that gas appliances shall conform to the standards established by the Association. The FHA states that the approval seal of the Association's Testing Laboratories or certification of compliance with the approved standards of the Association shall constitute evidence of compliance.

More than 93% of all domestic gas appliances sold in the United States have been tested and approved by the Association's Laboratories in compliance with national requirements.

Campaign to Promote Safety Work

EFFECTING an educational campaign to promote the program of accident prevention work among all employees of the gas industry, the Accident Prevention Committee of the American Gas Association met recently in New York. Chairman A. W. Breeland of Dallas, Lone Star Gas Company safety supervisor, presided. Others present were: C. J. Gefvert, C. L. Hightower, W. H. Adams, B. E. Kelley, E. J. Kreh, W. J. McVay, H. A. Ptolemy, G. J. Ruoff, T. J. Shaughnessy and H. D. Grothusen, representing Q. R. Dungan, and Dr. Cecil K. Drinker, by invitation.

This educational campaign will be carried on through the following activities which were adopted by the committee: Guides for safety inspections of manufactured gas properties, bulletin on public accident hazards, approval of safety devices, developing of American Gas Association safety posters, safety messages to foremen, A. G. A. safety news letter, motion pictures on rescue and resuscitation, guides for safety conferences, safety film slides, accident statistics in the gas industry and research.

Mr. Gefvert was appointed chairman of the Committee on Medal Awards, with Mr. McVay and Mr. Ruoff named as members. A number of applicants were presented to the subcommittee chairman and the subject of development of rules for award of special McCarter Certificates for Assistance was assigned to this subcommittee.

Appliance Servicing ... Today's Trend Is Toward Salesminded Technicians



T. J. Perry

DURING the past ten years the character of gas service has completely changed and in changing has become more important than ever before. This change might be dated from the time we first applied enamel and oven heat controls to gas ranges, but may be more sharply defined with the advent of the gas-fired refrigerator in 1927.

Parade of Changes

Since then there has been a constant parade of changes and improvements in appliance design, construction features and utilization, servicing procedures and methods. Servicing today is a skilled trade requiring skilled people and I do not mean to imply that our predecessors were less skilled; they simply didn't have the opportunity to demonstrate their abilities to the extent that we have.

What has brought about these changes? Possibly desire on our part, probably competition, but chiefly the urge that moves mankind to improve his living conditions through the elimination of burdensome work. Thus, we have the development of the four modern automatic domestic gas services, cooking, refrigeration, house heating and water heating. We know that the public wants and is willing to pay for these services and the question is not so much one of costs, but rather one of usefulness.

Servicing activities may be divided into three general groups: (1) Those activities required by law or governing bodies, (2) those which we must do to maintain our property safely and (3) those which we do to protect con-

- Competitive conditions and developments in appliance design have made the serviceman's job vastly more complicated than it was a decade ago. The ideal serviceman today must be salesminded and customer-relations-conscious as well as a skilled technician.
- More enlightened training is needed, according to Mr. Perry, and a different approach. He advocates "selling" the employee his job as well as "telling" him of the mechanics.
- Cost trends are startling, too, if Brooklyn Union figures are typical. In 10 years appliance servicing costs increased from 10.2 per cent of total service charges to 37.2 per cent.

By THOMAS J. PERRY

*The Brooklyn Union Gas Co.,
Brooklyn, N. Y.*

nected load and to develop opportunities for additional load.

Under the first heading we find such activities as the changing of meters for test at stated intervals of time as prescribed by Public Service Commissions, etc. In the second group we find property maintenance for protection of our investment. The third group is chiefly composed of appliance activities.

These groups are all important, but the third group is probably the most interesting because it involves customer relations to a greater extent than the others, and at the moment represents an increasingly large part of our activities. It affords the best opportunity for protecting connected load and development of new load because the customer regards the appliance as his own property and he is naturally more interested in his property than in ours.

In assuming the responsibilities involved in the third group, we who carry on the service activities must be

salesminded. When I say salesminded I am thinking of the gas load. If we do not approach the task of appliance servicing with this objective in mind, we might better wash our hands of the whole matter for there is no other justification for the expense of this undertaking.

Appliances in the modern home must provide convenience, dependability, comfort, reasonable operating costs and freedom from care on the part of the customer. If an appliance provides these things it belongs in the modern home, but if it falls short of this service it will soon be displaced. The appliance is the only available medium through which household work can be reduced and the customer naturally selects the most useful one, whether it is operated by gas or other fuel.

Competitive Challenge

Competitive selling does not make our task easier. Our competitors are making every effort to take our business and we do not resent their efforts although we sometimes resent their methods. The challenge affords us an opportunity to show what we can do and the results are speaking for themselves.

This type of selling, however, develops in the customer a more exacting demand for performance and the appliance must meet this standard. As a result, demands upon the service department have also become more exacting and the department finds itself in a position of greater importance and usefulness than ever before, with indications that servicing will become still more important in the future.

Servicing is not a task for a single group or individual, but rather is one for all groups; chiefly, the manufacturer, the gas company, the cooperating plumber-dealer and the merchant. Frequently, the service department is burdened with problems which actually are problems of design, construction

Presented before A. G. A. Distribution Conference, Chicago, Ill., April 17, 1939.

or application, and more logically belong to the sales department, manufacturer, plumber-dealer or merchant, or some combination of these groups. But if we are sales-minded (and I still refer to gas load) we cannot avoid the responsibilities attached to these problems.

Without our help solutions to these problems are more difficult for the Sales Department, manufacturer, etc. Better results are obtained if new appliances are submitted to the service department including Home Service, for examination and performance tests before being added to the sales line. Thus, servicing problems may be reduced; a distinct benefit for all concerned.

The service department is experienced in the ways of customers and our chief desire is to interpret customers' needs into practical performance on the part of the appliance. Obviously, this activity supplements A. G. A. Laboratory routine and manufacturers usually understand this and maintain contact with sales and service departments for the purpose of using the ideas of both to full advantage. Such a manufacturer is a successful one.

A Combined Job

To get the most out of these opinions, they should not be written by the same people, i.e., the sales department should not try to write the service opinion and the service department should leave the sales opinion to those more skillful in this line. The happy medium is the sales manager who combines the opinions of both to the best advantage and, I believe, this is the best way to build our business.

The ideal appliance is the one which need never be looked at once it is installed, but where is there such an appliance? The customer regards the ideal service as one where he need never call upon a serviceman, but as this is not yet accomplished we should so plan our service as to make it available when needed, no more, no less. Steps should also be taken to prevent repetition of the condition.

Not so long ago maintenance calls, or voluntary calls, played a big part in service activities, but we find such calls decreasing. This seems to be the natural result of the customer's wish

for appliances which operate continuously with a minimum of attention.

When attention is required it should be direct and thorough, and the best way to accomplish this is to provide proper training in fundamentals and adequate opportunity for servicemen to gain experience at our expense rather than the customers. Of course, the other groups must help because we can't do it alone.

There is a fine line of distinction between academic training and employee training. In academic training, success, or failure, is the student's responsibility, but no such easy course is open when employee training is undertaken because the Company pays for employee training and reaps whatever harvest it sows.

No Short-Cut to Experience

Through our training methods we may be able to find a short-cut to experience, but it hasn't been done yet. Complications in service work have resulted from the advancement of technical and promotional work in the appliance field which makes it necessary to emphasize the basic principles in our training as these provide a key to the simplification of service problems.

Consider an extract from a paper written by A. J. Noia, Pacific Gas and Electric Company, reprinted on page 7 of A. G. A. Interim Bulletin No. 35, "Job Training for Service and Appliance Installation Men."

"The qualities inherent in an employee, which best suit him for gas service work may be listed as follows:

1. Inherent mechanical talent.
2. Analytical, inquisitive and detective nature.
3. A man content to work, and a loyal attitude to the Company.
4. The ability to present himself verbally in a clear and agreeable manner.
5. A good personal appearance."

This is the best description of an ideal serviceman I have seen and if a man possesses these qualities, the problem of his training is solved. If he doesn't, our task is to develop these qualities in him. None of these five qualities deal with memory or with physical action; each reflects a mental attitude.

Training is a human problem, rather than a mechanical one. To show a man a thing; to tell him a thing; even to make him experience a thing, does not

assure his understanding. We must interest him, arouse his curiosity and stimulate his enthusiasm. If we can instill sincere eagerness to learn and can maintain that attitude by patient, thorough-going, simplified training in his language, the process becomes easier.

Training is a selling job, rather than a "telling" one. In preparing a training program, our chief concern should be for the effectiveness of our presentation rather than the scope of the program. This demands simplification of text material, the emphasis of principles, care in the physical layout of the schoolroom, perfection of the devices used in training, intelligent use of methods in presenting information and the selection of instructors for their personality and their understanding of men as well as their knowledge of the subject and their experience.

In developing latent mechanical talents we must equip our men with clear conceptions of such basic problems as proper combustion, which has become complicated by the narrowed tolerances resulting from the quest for higher appliance efficiencies.

Standardization Needed

To promote analysis as a habit, we need some standard medium of illustrating the functional plan of gas appliances, comparable to the wiring diagram or electrical circuit. It seems to me that we are now at this point and we should consider development of some form of common language which would tend toward standardization of appliance servicing activities.

In this way we can approach the methods of the electrical and radio industries who, in their manufacturing processes, use symbolic diagrams and sketches and often attach these to their appliances or furnish the information for service manuals. Servicemen in the electrical and radio fields are able to trace troubles in a great many instances merely by reference to a diagram. I do not believe such a development would obviate the use of manuals in our industry, but would supplement manuals and be of advantage in many ways. Furthermore, it would assist toward reduction of specialized servicing activity.

The three latter points outlined by Mr. Noia deal with personal qualifica-

tions and outnumber those dealing with the mechanical aspects.

We can promote an attitude of loyalty and responsibility toward the company by encouraging participation in the problems of the business. To develop self-expression we must emphasize its importance in our every-day activities.

In the consideration of appearance we must treat each man with the respect due one possessing all the attributes we seek in him, and through such treatment teach a man to respect himself. Uniforms are always helpful.

Use effectively in the service organization the talents which we develop. This can be accomplished by making opportunity available to the man who stands out in his possession of the five points. Toward this goal the employee should progress through definite stages of field experience from the simpler to the more involved phases of the work. His ability in each stage of the work should be demonstrated by a reasonable minimum period as a regular worker. Compensation should be progressively scaled with these stages.

Study Causes of Service Calls

We should devote more time to studying the causes of service calls and a simplified and standard form of reporting service data should be developed so that data may be accumulated in a manner which would permit greater use of this material in research.

Another important item in proper servicing is the element of time. With a closely coordinated service organization, it is possible to approximate time of completion between various classes of service work, based on urgency of the work, customer demand, etc. By means of such a schedule, it is possible to care for all customers without discrimination and the schedule may be adjusted from time to time as circumstances dictate. This provides the utmost flexibility, and without flexibility discrimination occurs and there is an adverse affect on customers' relations.

Every time the question of proper servicing arises, we eventually reach the question of costs and inevitably the discussion centers around affects on our business as a whole. For the purpose of presenting a modified picture of costs of this activity, in one in-

SERVICES ON CUSTOMER PREMISES—APPLIANCES

	<i>Appliance Service Costs—% Increase Over Previous Year</i>	<i>% of Total Service Charge</i>	<i>Average Number of Meters in Use —% Variation Over Previous Year</i>	<i>Metered Gas Sales —% Variation Over Previous Year</i>
1929	19.24	10.2	2.48	.46
1930	63.02	15.3	1.70	— .61
1931	41.62	21.2	.41	—1.47
1932	9.24	22.8	—3.63	—2.72
1933	6.83	24.9	—1.83	—4.24
1934	21.25	27.7	1.80	.45
1935	—1.20	27.8	1.49	—3.96
1936	15.89	36.9	1.38	2.25
1937	29.48	36.9	1.51	1.84
1938	5.40	37.2	1.36	4.39

stance, the figures in the accompanying table are set up to show the trend and, to some extent, the effect on gas sales.

In ten years the cost of appliance servicing in this instance has grown from a point where it represented 10.2% of total charges to a point where it represents 37.2% of total charges, but despite the growth, these costs now approximate but one-third of total service costs. From 1929 to 1933 refrigeration service experience is evident. From 1936 to date we see the affects of new house heating load. It will be noted that after a new type of load has been secured there is a tendency for costs to flatten out regardless of constant increase in the number of units in service.

This activity is making itself felt in gas sales, as indicated by the figures, and this is a healthy situation, particularly in the face of discouraging economic conditions. Of all the factors

affecting proper appliance servicing, costs are probably the easiest to deal with when the time is ripe, and there are many ways of doing this.

It does not seem desirable for the gas industry to relieve itself of the burden of servicing because to do so would place the responsibility in less skillful and less interested hands. Servicing today is a skilled trade and the industry is the only medium through which skilled people may be developed because the industry is organized to provide the necessary research and to afford opportunities for experience through adequate school training and field activity. This is one of the most important factors in the service situation today. Our customers are willing to pay for results and, this being so, there seems to be no advantage in relinquishing the responsibilities of the job, either from the standpoint of costs or of good public relations.

Gas Men Learn New Tricks



To be fully informed on the advantages of the modern CP range and to understand the importance of proper installation as it affects finished food products, The Public Service Electric and Gas Company of Newark, N. J., arranged for a five-lesson cooking course to be given to gas fitters and sales representatives. The men entered into the program with gusto and results were miraculous. Miss Della Cordery, home service director at Newark, supervised the classes.

Gas in Industry . . . A Romantic Story of the Most Versatile Fuel



Franklin T. Rainey

MANY people, both within and without the gas industry, believe that it is lacking in romantic appeal, that it is old and antiquated, that its scope of operation is narrow, that it is entirely on the defensive in retaining the load already established. Especially is this true in the domestic field, which field, to be truthful, covers about the only known uses of gas in the minds of most of our customers and even our employees. However, during the last few years the domestic phase of our business, through aggressive selling effort, has secured a new lease on life and has stimulated a new belief in its permanency.

Contrasted to this picture is the very rapid growth over the last few years of the industrial phase of our business, with its thousands of different and new applications which contribute their part in the manufacture of

* Vice-Chairman, Industrial Gas Section, American Gas Association.
Presented before A. G. A. Industrial Gas Sales Conference, Hotel Statler, Cleveland, Ohio, March 27 and 28, 1939.

By FRANKLIN T. RAINEY*

*The Ohio Fuel Gas Company,
Columbus, Ohio*

almost every product essential to our well being and enjoyment of living. Certainly, no phase of operation in the gas industry offers such possibilities of stimulating a new interest, new appeals to the imagination, a new and romantic conception of the importance of our business, and a positive belief in the future of our industry.

How to Stimulate Interest

Industrial managers should take the initiative in attempting to stimulate interest in the industrial phase of the gas business within their own respective organizations. Most successful and aggressive gas companies conduct educational courses for the enlightenment of their employees in all branches of its operation, and from time to time meet together in groups for such presentations and discussions. Certainly a time and place could be assigned on such a program for imparting information relative to the industrial phase of our business. Certainly, its importance justifies this consideration.

How then can we impart this knowledge and information to our employees

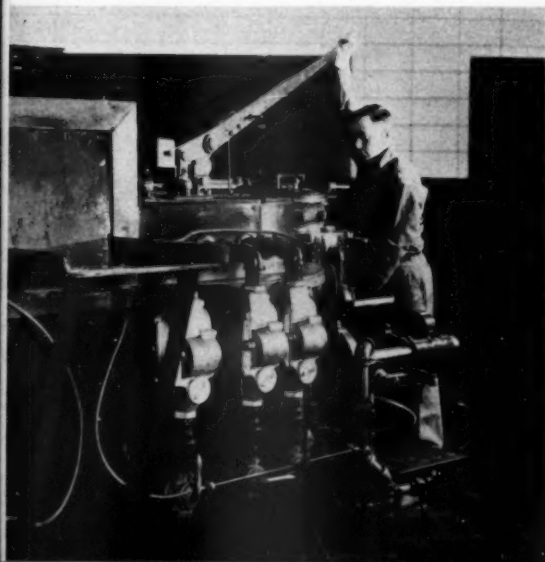
engaged in its other branches of operation? The ideal way, of course, would be to conduct a tour through the various industrial plants, so that they might see the many varied uses of gas and the highly specialized equipment in which gas is used. However, in most instances it is impossible to do this, so this knowledge must be imparted either through pictures or in story form. I believe that one of the best ways is through story form, non-technical in nature.

Whatever type of story is told should be localized largely within your own territory of operation, with references to specific industries and business on your lines.

To illustrate, I am relating a story we have used with a marked degree of success within our own Company. It is condensed in form as here presented, and reference to specific industrial plants have been eliminated. I hold no brief for this story and believe sincerely that each of the industrial managers and engineers could develop a more interesting and effective story. It is non-technical in nature, and, of course, very elementary. Here it is.

The Industrial Uses of Gas

If I were to ask most of you about the use of gas, you would probably say



Stereotyped plates are cast in ultramodern gas-heated stereotype pot for the Toronto Globe and Mail. At left is Kemp immersion gas system for melting stereotype metal

that it is used to cook your food, heat water, refrigerate your food and heat your house, and also it is used in industry. Because of this fact, many of you perhaps may think that the gas business is an antiquated business—a thing of the past with no romance—nothing that lifts it out of a tiresome routine of a few domestic operations. Is it something practical from which we derive daily benefit, or is it an industry entirely foreign to our daily needs?

May I tell you a few facts about this product of ours that I hope will firmly entrench it in your minds as one of the remarkable discoveries for which all of us should be continually thankful?

You may be surprised to learn that there is hardly an activity we civilized humans indulge in, hardly an item among the manufactured things that make life worth living in this present day in which gas hasn't played a most important part. Now just how does gas touch our lives from day to day? Well, let's run the cycle of the average man's day.

The Awakening Touch

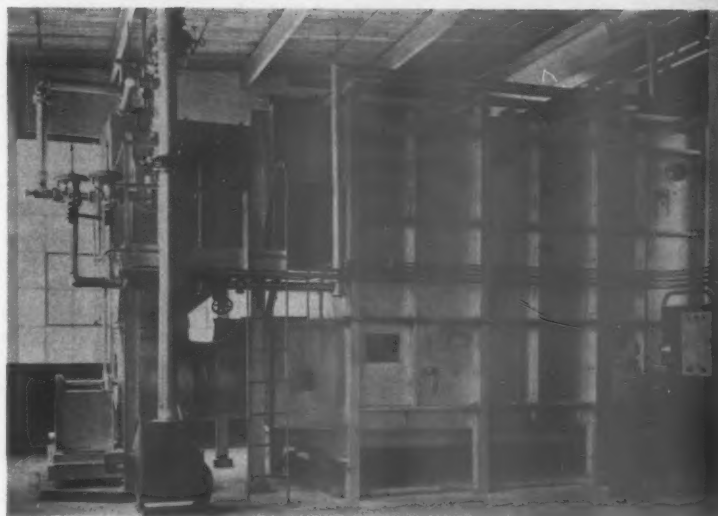
The first thing most of us look at when we open our eyes in the morning is the old alarm clock. It is the sentinel that protects our jobs and it keeps pretty accurate time, thank goodness. It is a reliable sentinel because truth has been set into its mechanism by gas treatment. Its japanned face and numbers have been baked in a gas-fired oven, its main spring and hair spring have been properly tempered at approximately 1,450° in a gas-fired furnace, its many gears and spindles have been made from properly melting and mixing copper, zinc, and tin in a gas-fired furnace heated to 2,100°.

Zip! Out of bed and for the bathroom! No more tin tub and drab walls there. The clean, glistening tiles on the floor and walls were glazed and finished in gas-fired kilns, some of which are nearly three hundred feet long. And the inviting enamel on the fixtures and tub. Even the enamel, itself, was made by melting special rock, lime and soda ash in the right proportions in a furnace heated to 2,300° by gas fuel. This material is poured into cold water where it is shattered into small particles. The material is then ground and sprayed or powdered onto the cast-iron tub which is then placed in a gas-fired enameling

Vases, glassware, lighting fixture globes and other types of ware are now made by direct gas-fired lehrs. This picture shows a 10-ft. by 65-ft. double belt annealing lehr



Recirculating air heating by gas is even being applied to carbottom furnaces these days. This handsome new job is one of the first carbottoms to be so fired. It's a stress reliever



furnace heated to 1,750° by means of gas. Here the enamel is fused onto the metal surface of the tub and we see in our home then only the beautiful white or colored surface of the tub and other bathroom fixtures. Gas was even used in silvering the mirror which we use for shaving. And speaking of shaving, it was gas that tempered the razor blades and vulcanized the brush handle so that the hairs stay in the brush instead of joining out with the lather.

As we dress, we put on linen that has been gas-treated, and gas-treated shoes. Our clothing is dyed with colors that come from gas by-product distillates. Also from these same distillates come the basis of the powders in toilet articles that help make our women so beautiful.

At breakfast we only think of gas as cooking the food, but this good old

faithful range of ours has largely been made possible because of the gas used in its manufacture. The brass valves, the steel sides of the range, the hardware, the temperature control unit, all have undergone many changes in shape and physical structure because of various heat treatments in gas-fired furnaces before we see the beautiful enameled range that adorns our kitchen.

And our breakfast—to be sure, it is cooked with gas, but how about the foods before they reach the gas range. Gas roasted the coffee before it went to the grocers; gas baked the bread in ovens a hundred feet long and automatically controlled as to speed and temperature, so that each loaf will be uniform; gas cured and smoked the bacon in ovens where part of the gas heats the ovens to the proper temperature and part of the gas burns the hickory sawdust that gives the bacon

that delicious flavor. And the lowly eggs that we have for breakfast—the chances are very great that these eggs came from a mother that was hatched in a gas-heated incubator, and nursed through infancy in a gas-heated brooder. As for the morning paper at breakfast—well, gas melted the stereotype and linotype metal used in its printing.

How About Your Car?

Our hat, gloves, and umbrella have all been produced with the aid of gas-fired boilers. If we are driving to business, we get into our car in which hundreds of its parts have undergone many gas-fired heat-treating processes. If the finish on the car is holding up pretty well, it is because the lacquer has been dried in long continuous gas-heated ovens, some of which are nearly 1,000 feet long. Even the spraying booths in the ovens are properly air-conditioned by gas. Gas has block-tested the engine, melted the bearings, heat-treated the gears and other wearing parts, galvanized the radiator, vulcanized the tires, melted and annealed the window glass and the rear view mirror, and heat-treated the springs for proper resilience.

Even the gear teeth, piston pins and cams have not only been heated with gas for proper wearing surfaces, but part of the gas itself, the carbon, has been driven into these surfaces so that they may more ably withstand the terrific shock and wear to which these surfaces are subjected.

Even the crankshaft, piston rods, etc., are forged out of bar steel that has been taken from forging furnaces heated by gas to 2,400°. Even the nuts, bolts, and washers—all are heat-treated in gas-fired furnaces. Yes Sir! Gas has played a tremendous part in building up the confidence that we place in that car of ours. It may seem hard to believe that the same gas we produce and sell every day is used in forming and tempering the little spring of the valve in the rear tire and is also used in melting and forming the big steel ingots, weighing thousands of pounds, from the open hearth furnaces at 3,000° F., but nevertheless, it is true.

And as you drive along, nearly everything you see has been dependent upon some process of manufacture by gas. The galvanized steel fence posts and wire—the asphalt road—the rail-

road tracks we cross—parts of the bridges we cross—safety signals—intersection signs—and many parts of the buildings themselves, even those mighty steel tires of the locomotive have been removed and put on by gas heat. The bronze journals—the bell—the whistle—all have used gas in their manufacture.

And at your work, if you have an office position, gas has played a prominent part in making the steel furniture of your office, the intricate parts of the typewriters, adding machines, pens, pins, and clips. If you are in the transmission or production department, gas has heated the big furnaces in which the pipe you use and lay was made—the wrenches and tools you use—even the hooks and clasps of the overalls you wear.

And at lunch time, you pay your lunch check with coins that contain specie melted by gas and which are flipped into a cash register that has undergone hundreds of gas heat-treating operations to its many intricate parts. And on the way back to your afternoon work, perhaps you indulge in a sack of peanuts roasted by gas—or some candy whose manufacture was dependent on gas.

Even on Golf Course!

Or perhaps it is Saturday afternoon and you desire to play a little golf. If your score is good, the chances are very great that your "woods" were properly seasoned in gas-fired kilns and your "irons" were properly forged and heat-treated in gas-fired furnaces. Even from the celluloid tees to the containers used on the 19th hole—these things are the result of proper gas applications.

So, after a hard day (at the golf course) you return home to dinner. My, what a pleasant place to return to, and as you enjoy the luxury of your home, just remember that gas helped produce the stains and varnishes for the woodwork and furniture—it shaped the design of the lighting fixtures—melted and shaped the glass bulbs themselves—and burned the lime used in the plaster of the walls.

And as you sit down to supper, don't forget that gas glazed the china, forged, heat-treated and plated the silver, melted and helped form the

glassware. Even the dinner gong or bell is made possible by gas.

The things you want cold—fruit, butter and milk—are probably taken from the gas refrigerator whose beautiful finish, its porcelain interior, its hardware and mechanism have all gone through many gas applications.

And after supper you spend a quiet evening at home either reading a magazine, the ink of which was dried instantly by gas heat, or listen to the radio. Here gas again has played a large part—from melting the glue that holds the cabinet together to the melting and heat-treating of the radio's various parts. And although you think of the radio as an electrical appliance, don't forget that gas has played a prominent part in its manufacture—even to properly annealing the copper wire used in the antenna.

—And at Night

And so as the evening draws to a close, the lights are turned off. Oh, yes! The springs and contacts in that electric switch were melted and formed with gas; the doors locked for the night; and by the way, the springs, keys, and many parts of the lock were melted and formed with the aid of gas. You wind your way to the bedroom—undress and retire—thankful for the accomplishments of the day, a feeling of confidence that the trusted sentinel will awaken you on time tomorrow, and with full knowledge that you will have a well-earned and comfortable night's rest because of your bed made possible by the gas-tempered springs of the mattress.

Yes sir! This modern world of ours certainly draws on gas for the development of many products that make our lives happier and easier and eliminate much of the drudgery that our forefathers endured. Through research and engineering, new uses for gas are constantly being developed which is making it more indispensable to the manufacturer. In fact, in many operations, it not only produces the heat necessary for such operations, but part of it is used in the physical and chemical reactions necessary in the production of the article, such as the bright annealing of copper or steel, or the creation of hardened steel surfaces to withstand shock and wear.

(Continued on page 200)

The Science of Selling ... *A Symposium of Modern Gas Sales Plans and Policies*

- The American Gas Association, through national advertising, sales contests, regional conferences, home planning activities, architects' and builders' programs, and other cooperative undertakings, is attacking the sales problems of the gas industry nationally. Most important, however, is how local companies are making these national programs effective; how they are actually selling gas service to their customers.
- Herewith is presented the second part of a symposium on the sales policies and practices of a representative group of companies. Each of these programs is based on long experience. They, along with the practices of hundreds of other companies in the industry, represent the intelligent, progressive sales policies that are the keystone of the industry's progress.
- These papers are a significant contribution to sales thought. They may be read with profit by all in the industry. More complete information on specific parts of each program may be obtained from the company involved. The first part of the symposium appeared in the April issue.



By
J. H. Warden
General
Sales
Manager

Oklahoma
Natural Gas Co.
Tulsa, Okla.

A SALES DEPARTMENT WITH ONLY SERVICE TO SELL

THIS story comes from the only state where public utilities are forbidden by law from selling, renting or giving away appliances. In many states anti-merchandising laws have been promulgated. In only two have these become a reality, and only in Oklahoma does such a law still exist. Right or wrong it is the law here and we are anxious to make it work to the mutual benefit of our dealers and ourselves.

Having been legislated out of the merchandising business in 1931 we set about a plan of directing our efforts toward active cooperation with the many dealers upon whom we were now dependent for the extensions of our domestic load. The dealers at first were very reluctant to cooperate with us,

feeling that we must have some ulterior motive behind our wishes to assist them.

Knowing that our progress could not be measured in increased load alone, because of the many variable factors such as weather, business condition, etc., we felt that one of the best measures of our progress would be monthly reports on appliance sales. These were hard to get largely because of the fact that dealers felt we would use them later to prove that we should be back again in the merchandising business. Such was not the case, of course, but it has been a long hard struggle to overcome this feeling of apathy.

Our dealers are very much like those

you would find in any other state. There are, first of all, the well-established department stores and the prosperous furniture stores. There are also the nationally known chain stores who know how to take advantage of every situation and turn it to their profits. There are also the smaller, less pretentious furniture stores and the many specialty stores which have added appliances one by one as they reached the point of profitable acceptance.

Then, of course, there are the plumbers, some of whom have actually become merchandisers but the vast majority of whom are still plumbers selling merchandise only as a means of obtaining the day labor of installing them.

Hardware stores are assuming an importance in our merchandising picture, but all of these dealers just remain in the order-taking class until they actually organize their appliance departments on a business like basis, and maintain a crew of men who will go out and actually create a desire for good equipment.

With this kind of a dealer organization with which to work it is necessary for us first of all to win the confidence of all dealers both large and small. Our district sales managers scattered throughout the territory we serve make frequent visits to all dealers, as do our

home service directors, offering them the cooperation of our company in their activities and assisting them in working out problems which confront them. Sales managers trained as they are in problems of gas utilization are able to assist dealers, especially with their heating problems by assuring the dealers of satisfied customers and assuring customers of adequate equipment.

Another project we have set for ourselves is the education of customers in the desire for better equipment. Many of our dealers have been prone to offer the cheapest equipment possible and we have taken it as our challenge to educate customers to demand the kind of equipment we know will serve them best. We also hold meetings designed to educate dealers and their salesmen in the correct use and installation of appliances and strive always to elevate their selling stories to a point where they will bring back romance to the gas industry and glamour to the appliance that they sell.

Merchandising Leadership

The most important project is to establish merchandising leadership. The dealers are brought together several times during the year to cooperate in important merchandising activities. Our merchandising activities are so planned that we can assist all of the various types of dealers at least two or three times a year and give them, in rotation, an opportunity to join with us in creating a market for their equipment.

Our "Old Stove Round Up" and our "Water Heating and House Heating Campaign" are both accepted now as annual institutions. We also have impressed the dealers with the fact that our employees, nearly 1000 in number, are busily engaged in securing prospects among their friends, to whom dealers may sell their equipment.

Results

In 1937, in the face of a steady decline in gas range sales during the first months of the year, we launched our first "Old Stove Round Up" and in six weeks sold over 2,500 ranges as compared with 1,472 during the same six weeks of the previous year. Our water heating campaign which was run as a single unit in the fall of the same year produced in six weeks a total of

800 floor furnaces and 1,300 water heaters, as compared with a combined total of about 2,000 units for the same period the year before.

In 1938 our floor furnace and water heater campaign, in the face of warm weather and receding business in other sections of the country, produced increased business. This is no proof that we can wave a magic wand over our customers, but merely that cooperative efforts with all dealers telling the same story at the same time gives big dividends.

Of course, we have our problems; one of them is the fact that many of the dealers have fallen into the habit of cutting price, perhaps because we are not selling merchandise and thereby establishing a price level for customers and dealers alike to follow. Another problem is the transient help employed by appliance dealers, men who sell refrigerators during the refrigerator sea-

son, tires when tires are selling best, heating equipment during the heating season, men whose selling story is learned only for a short period and as quickly forgotten. With this kind of salesmanship, it is sometimes hard to encourage the idea of selling quality merchandise, but our efforts in this direction are bearing results, as is evidenced by the number of Certified Performance Ranges we have been able to put out entirely through the medium of dealer organizations.

In conclusion, we should like to add this word of encouragement to you who are treading cautiously on the path of dealer cooperation. There surely is a happy solution to your problems. We in the gas industry cannot employ all the salesmen in the world, but through establishing good leadership we can make better salesmen among our dealers and thereby magnify our own efforts a thousand per cent.



By
Hudson W. Reed
Executive
Vice-President

The Philadelphia
Gas Works Co.
Philadelphia, Pa.

MERCHANDISE TO PROVIDE OTHER APPLIANCE SALES OUTLETS

THERE is a marked distinction between merchandise sales and load building. The first represents the sale of appliances; the second represents the increased use of gas.

There are numerous factors that aid in the sale of gas appliances:

Proper selection, training, and remuneration of sales representatives;

Attractive and impelling advertising—advertising that puts its story across;

Adequate prospect bonuses to employees turning in productive leads. Employee cooperation here can produce surprising results to the mutual benefit of all;

A well-trained staff of women in the home service division;

Representatives who can adequately present the merits of gas appliances to builders of homes, architects, and owners or managers of apartments;

Attractive sales and window displays, well lighted, pleasingly decorated, and changed often enough to create continuous interest.

These and many other factors of lesser importance are essential for the sale of appliances. However, there are other basic factors of major importance that must be recognized if the appliances sold are to contribute permanently to a load building program.

A SALESMAN who believes that the only difference between a rut and a grave are the dimensions, says: "The best way I have found to get an order is to point out the unusual sales point in our merchandise. In other words, what extra value our products offer."

—CY NORTON

Guidance of the Customer in the Selection of the Appliance

The ultimate purchase should, of course, represent customer-desire, providing the appliance selected is adequate for the purpose. This is important as it affects customer relations and other sales.

This is an era of change—continuous refinements and improvement of all appliances. We are prone to rely too much on the claims made by manufacturers as to the merits of innovations. This passive confidence may result in operating results falling below the guaranteed standard of performance.

No amount of servicing and sales adjustment work will compensate the customer for the disappointment thus experienced. Even outright replacement will leave a feeling of doubt in the customer's mind as to the superiority of gas appliances, and may even result in the loss of gas load.

No gas company worthy of the name should promote a new appliance model without first determining in its laboratory if it is free from operating defects.

Sell the Appliance the Customer Can Afford To Buy

Too often high pressure salesmanship results in a crushing financial burden being placed on the customer. Appliances then frequently revert at considerable expense to the company, and embarrassment to the customer.

Load building does not require large profits from merchandising. It does, however, require sales at prices the customer can afford. To illustrate, recently we conducted a sale of water heaters at \$53 cash. We sold about four times as many at this price as we did at the former price

of \$80. The higher price was more than many felt could be paid, even on an installment basis.

Our experience with ranges is similar. Formerly we sold only the higher-priced ranges, thereby losing out on the sale of ranges in the lower price field. The cheaper ranges sold by other distributors often resulted in many installations which caused trouble to both the customer and the company. This condition compelled us to develop a line of reliable ranges that could be sold for \$45 and up. Now our range sales are almost twice that which we formerly enjoyed, and we have the satisfaction of knowing that the low-priced ranges sold are as free from service troubles as the higher-priced ones.

Sell on Terms Within the Customer's Income

Facing the competition of rented ranges and water heaters, purchasing terms equally attractive should be provided. Such terms give the customer the added advantage of owning appliances upon completion of the payment period.

As any good gas appliance can be guaranteed for a five-year period, why not sell them on that basis, if necessary? This may not be the most desirable type of merchandising, but it often permits the retention of present load, or adds permanent new load not otherwise attainable. If federal home financing is stretched over two decades, certainly a five-year payment period on an appliance guaranteed that long—and likely to outlive the home—is not out of line.

The Sale of an Appliance Is but the Commencement of the Utility's Responsibility

Prompt and efficient service throughout the life of the appliance is necessary for the permanent retention of gas load. Far too little concern is given to the training of customer service employees. Not only must they be thoroughly versed in all phases of the construction and operation of gas appliances, but they must necessarily show tact, courtesy, and a sympathetic feeling towards the customer's troubles. Many sales are ruined by inexperienced and poorly trained service men. Con-

versely, many dissatisfied customers become friendly with the company through proper service. It is the salesman who makes the original sale, but frequently the service man keeps the job sold.

Relationship of Appliance Sales to Load Building

The sale of appliances by a utility must be justified on the basis of load building or load retention. Our policy is to actively merchandise appliances in a manner that provides other appliance sales outlets with an equal selling opportunity. Dealers affiliated with the company can offer to the public the same appliances, terms and selling advantages as utility salesmen.

Where the appliance has customer acceptance, such as the gas range, we sell only about 15% of the total. Through advertising, appliance display and field sales work, however, we definitely influence the type and quality of appliances purchased from other outlets. We regard this as the correct utility policy with an accepted appliance.

With less accepted appliances, such as the gas automatic water heater and the gas refrigerator, we believe that the utility should adopt a more forceful sales policy, as dealers will not promote such appliances. This results in a high percentage of total sales of these appliances being made by or through the utility. It involves the use of load-building bonuses for salesmen, substantial advertising and display promotion, and, perhaps, special customer inducements to increase sales acceptance.

Gradually, as the appliances gain acceptance, we would expect a greater portion of the total to be sold directly by the dealers, until, with complete acceptance, the utility influence would be directed toward improving the quality of the appliances sold by advertising, example and promotion.

Summing up our policy we believe our customers should have guaranteed appliances most suitable for their needs, at a price and on terms they can afford. Such sales backed by proper servicing will result in attaining our objective—permanent load building.



By
Guy T. Henry
President

Central Indiana Gas Company

Muncie, Indiana

SPREAD DOCTRINE OF MODERNITY AMONG YOUNG PEOPLE

THE Central Indiana Gas Company follows the system of territory salesmen, each having about 1,000 meters. The sales staff heads up locally to a Division Sales Supervisor, who reports to the Merchandise Manager. A General Commercial Manager is in charge of the entire sales and commercial activity of the company.

Territory salesmen make house-to-house surveys, reaching every house in their territory. Important information on the appliances in use, and other pertinent data, are taken down in code on permanent sheets. At the same time the salesman is getting the information, he determines any servicing of the customer's appliances which might be advisable. The service order is turned in at the office by the salesman, and followed up in the same way as orders originating directly from customers. The salesman also takes advantage of the opportunity to leave descriptive literature.

Market Classified

From the survey sheets, the occupants are classified in three broad general classes: out of the market, "suspects," and prospects. From this point on, scatter-shot methods give way to concentrated effort, and future activities are confined to persons who represent potential business.

A feature of the physical equipment of all Central Indiana salesmen is their sales portfolio. This contains carefully selected information of all kinds designed to help the salesman produce. Where appropriate, manufacturers' pieces have been used, but the company has enlisted the aid of some members of its own staff to produce special material. Any question which cannot be answered from this treasure chest

of information is special, and has to be handled as such.

While doing very well in its effort to keep present customers, the company also has an eye on future users—a plan which it is carrying out through the schools. Where it is not possible to equip whole laboratories with new equipment, modern equipment is loaned for demonstration purposes. The demonstration equipment is periodically exchanged by the company to keep it up-to-date. This program has the whole-hearted support of domestic science instructors, and subtly but dramatically informs them of the advancements made in home appliances.

At Muncie, the company serves Ball State Teachers College, one of the four

major schools of higher learning operated by the State of Indiana. Despite aggressive competition from the electric industry, the gas company has steadily increased the use of its service in the college. Some college classes, such as those on sales subjects, demonstrate their technique with gas merchandise loaned by the company. The study given the project by the students spreads the doctrine of modernity among young people who influence others.

Dealer Cooperation

The company's policy of cooperation with range dealers has stood the test of time. Ranges are connected for dealers without cost; provided the merchandise is A. G. A. approved, delivery is made by the dealer, and no unusual work is required in the connection. From the dealer's viewpoint, he is saved a plumbing fee and his profit is increased thereby. Dealers have also found that gas company adjustments insure customer satisfaction those important first times they use the new appliances. From the gas company's side, duplicate trips by service men and meter men are often avoided, and it is possible to keep in contact with what is being done by dealers. Incidentally, range connections are so



A striking illustration of effective sales display is this view of the exhibit of the Citizens Gas and Coke Utility of Indianapolis, Indiana, at the Home Show held at the Fair Grounds, April 13-23. Tying in with the national advertising theme, "Use Gas for the 4 Big Jobs," the novel exhibit included a model kitchen and model basement as well as the display shown above. Four internally illuminated shadow boxes attracted attention to the exhibit. G. A. Saas is advertising manager of the company.

small a portion of the plumbers' business that no objection has arisen from them.

Three times a year, dealer cooperative sales events are staged. Two of these are in conjunction with the Indiana Gas Association, and come in May and November. In the fall, the company holds the annual Old Stove Round-Up, its biggest sales activity of the year, but not an I. G. A. activity. At these times, the company supplies its dealers with floor and window displays and miscellaneous sales helps, all without cost to them.

Newspaper advertising for these three sales is set up under either of two plans; page, or cost-sharing. In both cases, all solicitation is done by the newspaper, working with the company. Where the page plan is used, the gas company provides an advertisement of about one-quarter page on the promotional features of gas cooking, and agrees that it will pay for this space if three or more dealers participate in the balance of the page. If three or more dealers take panels, the company then protects the whole page by inserting a merchandise ad over its own signature. Under the cost-sharing plan, the dealer gets a refund of one-half the cost of his ad, providing it is exclusively devoted to gas and contains promotional features of the service.

Nor are plumbers overlooked in cooperative dealer policies. The company has found that cultivating the water heater field through plumbers produces best results for both parties. Often a plumber finds a customer interested in an automatic water heater, but he is not able to give the matter sufficient sales attention to clinch the deal. In such cases, he may turn in a prospect card to the company, and it will be followed up by the territory salesman and the sales supervisor. If the company makes the sale, the plumber is given the job of installing the heater. While this may look like small returns on the sale, the plumber is relieved of all inventory, sales, and financing problems, and gets a profitable job of plumbing. If every detail, including installation, should be handled by the company, the plumber still receives a flat \$1.50 for the prospect.



By
A. B. Groesbeck
Vice-President
and
General
Manager

United
Gas Corporation
Houston, Texas

MASS MARKET OFFERS UNLIMITED OPPORTUNITIES FOR GAS

OUR sales problem is complex due to the nature of our properties, which extend over a wide area. We serve approximately 165,000 customers in 176 cities, towns and communities in Texas, Louisiana and Mississippi. Our customers are composed of various groups whose nationalities, living habits and desires are fundamentally different.

Prior to 1934, our sales policies were based on the premise that an aggressive company merchandising program was the answer to our load building problem. However, a study and analysis of the results secured from this program revealed that we were overlooking some important factors which could make our sales efforts more productive. We came to the conclusion that the mass market offered unlimited possibilities for the sale of GAS SERVICE and gas appliances and that mass selling on the part of all members of the gas industry was necessary in order to accomplish maximum results. And so we revised our policies to conform to two major efforts:

1. To sell a greater appreciation of the value and usefulness of our gas service, its many uses, value and its overall economy, and thus to develop an even greater market for gas appliances and utilization equipment;
2. To promote the sale of gas appliances and utilization equipment through all dealer outlets and to develop as many sales outlets as possible with the aid of manufacturers and distributors.

We feel that our primary job as a utility is to sell new and additional uses of our service. To this end the following general sales policies have been established:

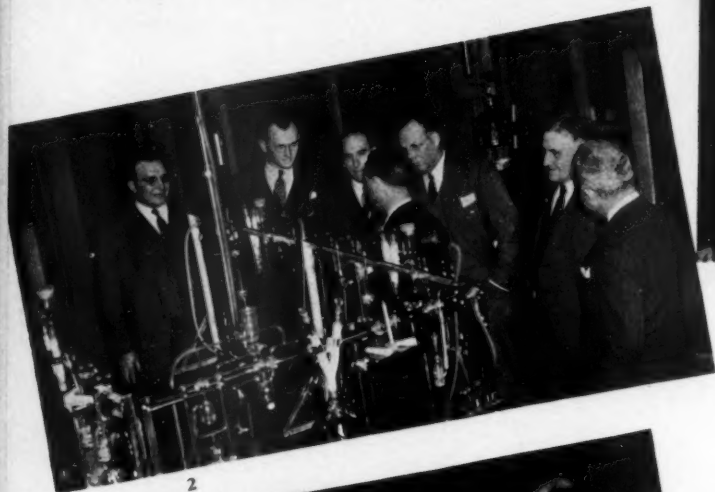
- thorough study of the market to determine opportunities for constructive sales effort.

- setting of sizeable sales objectives based on market facts and revenue needs rather than on past performances.
- preparation of comprehensive written sales plans outlining all promotional sales activities to reach our objectives.
- dramatizing all sales programs through proper showmanship, sales promotion and advertising to develop customer appreciation of the company and the value of its natural gas service for home, business and industry.
- organizing and training of an adequate all-service sales personnel with special emphasis on training not only salesmen and district managers but all employees with respect to company policies and the value and many uses of its natural gas service.
- adequate compensation on a straight salary basis for all sales employees with due consideration for sales abilities and results secured.
- carrying out a comprehensive gas service advertising program in the most effective media, such advertising featuring the many uses of our natural gas service, its value, economy, benefits and advantages.
- keeping adequate records to measure sales progress and determine sales costs.

We realize the need of having the full cooperation and assistance of our sales allies in order to reach our sales objectives. We look to them for a large volume of gas appliances and equipment sales and are desirous of assisting them in every practical way to increase this volume. To this end we have in operation a cooperative dealer-company sales program, without subsidies of any nature whatsoever, incorporating the following features:

- annual published statement of company's merchandising policies and practices. The overall extent to which the company engages in merchandising is governed by the necessity for aggressive leadership in order to secure maximum dealer sales

(Continued on page 199)



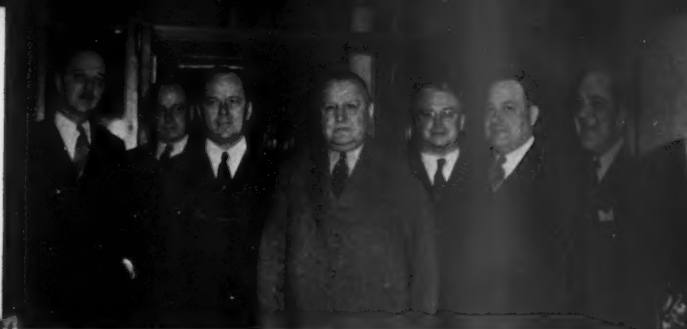
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Directors Visit Laboratories

THE March 29 meeting of the Executive Board of the American Gas Association was held at the Testing Laboratories in Cleveland. This was followed by an inspection trip through the building where various appliances and accessories were viewed under test and current research activities observed. The accompanying photographs were taken during the course of the inspection.

1. President Conrad N. Lauer in the center; on his right are Vice-President Walter C. Beckjord, A. F. Bridge and N. T. Sellman (Chairman, Laboratories Managing Committee); on his left are George F. Mitchell, and former Presidents N. C. McGowen and Clifford E. Paige.
2. Dr. Vandaveer describes the operation of the iodine pentoxide machines used for analyzing combustion products. Left to right, H. A. Ehrmann, Frank H. Trembly, Jr., D. W. Harris, Frank H. Adams, C. E. Gallagher, Clifford E. Paige.
3. R. M. Conner, director of the Testing Laboratories, explains one of the strength tests applied on a domestic range to Merrill N. Davis, President Lauer, Davis M. DeBard, Walter C. Beckjord, Marcy L. Sperry and Wm. G. Hagan.
4. K. R. Knapp, chief engineer of the Testing Laboratories, on the extreme right, explains some test procedures to three members of the Board, namely, left to right, L. B. Eichengreen, W. E. Derwent, F. M. Goodwin.
5. Mr. Conner, facing the group, explains the work carried on in the Chemical Section. Others in the photograph are, left to right: A. F. Bridge, Davis M. DeBard, Merrill N. Davis, Walter C. Beckjord; F. S. Dewey, Marcy L. Sperry, K. C. Long, President Lauer.
6. Exterior view of Testing Laboratories in Cleveland.





Above—Clifford E. Paige, president, The Brooklyn Union Gas Co., is shown making the opening address at the dedication of the Court of Flame

At right—Kate Smith, noted radio personality, at the microphone during the preview of "Homewood," the all-gas Good Housekeeping Home

Dedicate Court of Flame

NINETY-FOOT pylons sent pillars of flame into the New York sky as the gas industry's "Court of Flame" exhibit group and "home of tomorrow" were dedicated at joint ceremonies at the New York World's Fairgrounds, Friday evening, March 31.

The lighting of the pylons, and the pre-viewing of "Homewood"—the All-Gas, Good Housekeeping Home which is a major feature of the gas industry's exposition group, took place before an audience of gas industry officials, educators, industrial executives, and other notables. Gas Exhibits, Inc., who arranged for the gas industry's participation in the Fair was the host.

The first part of the program was held within the spectacular "Court of Flame." Here, as the one thousand guests assembled, tongues of blue and

gold flames were leaping up the four 90-foot pylons to illuminate the evening sky.

After being introduced by W. T. Rasch, vice-president of Gas Exhibits, Inc., who acted as chairman during the ceremonies, Clifford E. Paige, president of The Brooklyn Union Gas Co., made the opening address. Hugh H. Cuthrell, president of Gas Exhibits, Inc., had been scheduled to make this speech but due to illness, he was unable to be present. Mr. Paige was followed by Commander H. A. Flanigan, vice-president of the New York World's Fair Corporation.

From the steps of the white pillared portico of the All-Gas Home, Mr. Rasch introduced Miss Helen Koues, director of Good Housekeeping Studio, who designed, furnished and decorated the model "home of tomorrow."

The ceremonies were followed by a reception in the Terrace Club.



Celebrities were profuse at the dedication ceremonies. Shown here are, left to right: George Rector, noted restaurateur and official gas industry host at the Fair, Helen Koues, director of Good Housekeeping Studio, who designed the "home of tomorrow," and Kate Smith



Herbert A. Wagner, president of the Consolidated Electric Light and Power Co. of Baltimore, making an acceptance speech at the unveiling of a tablet commemorating the manufacture of illuminating gas in America. Left to right: Dr. John C. Krantz, Mr. Wagner, Prof. S. C. Lind

Commemorate First Commercial Use of Gas in America

DURING the annual convention of the American Chemical Society in Baltimore, Maryland, on April 3, the inauguration of a chemical industry in America—the manufacture of illuminating gas—through the founding of the first gas company in the United States was commemorated by the unveiling of a tablet on the building of Consolidated Gas Electric Light and Power Company of Baltimore, the direct descendant of the pioneer American company, which was granted its franchise in 1816.

On behalf of the Maryland Section of the American Chemical Society, Dr. John C. Krantz introduced Professor S. C. Lind, president of the American Chemical Society, who said in part:

"Coal gas was first made by Joannes Baptista Van Helmont in 1609. Murdock in Cornwall, England, lighted his own house with coal gas and in 1812 the first gas manufacturing company in the world was established for the city of London. In 1802 gas illumination was utilized in Baltimore by Benjamin Henfrey, and in 1816 Rembrandt Peale lighted his museum with gas made from a small plant back of this building. These buildings, we understand, are still standing. From this demonstration of Peale's came the founding of the Gaslight Company of Baltimore which we are honoring today. Following this founding of the Baltimore company, the New York Gaslight Company was put in operation in 1825 and the Boston Gaslight Company in 1828.

"The carbonated water gas process was invented in 1872, and, as is well known, the value of this gas to the industry is of enormous importance in that it affords great flexibility of output as water gas machines can be started and stopped as needed.

"Without going into the various chemi-

cal methods of the purification of gas, it is sufficient to say that the development of these processes has been one embracing fundamental chemistry, placing this industry definitely among the great industries of the country."

In accepting the tablet, Herbert A. Wagner, president of Consolidated Gas Electric Light and Power Company of Baltimore, said:

"As the direct descendant of the company to which was granted the first gas franchise on this continent, the Consolidated Gas Electric Light and Power Company of Baltimore gratefully acknowledges and accepts the tablet which the American Chemical Society has erected on this building.

"The founding of the Gas Light Company of Baltimore and the granting of the pioneer charter by the Mayor and City Council in 1816 marked the beginning of the first commercial use of gas in this country; and today the gas industry has grown to be one of the great chemical industries of the world.

"Twenty-three years ago the American Gas Centenary was observed in Baltimore to mark the successful completion of the gas industry's first one hundred years on this side of the Atlantic.

"Throughout the 122 years the supply of gas has been continuous. On the occasion of the Baltimore Fire in 1904, which destroyed the business section of the city, the supply of gas to Baltimore was uninterrupted."

Coast Counties Changes

ANNOUNCEMENT has been made by H. L. Farrar, President of the Coast Counties Gas and Electric Company, of the appointment of A. R. Bailey as assist-

ant to the president, a newly created position, with headquarters in San Francisco.

K. B. Anderson, manager of the Coast Industrial Gas Company and Coast Natural Gas Company, has been appointed superintendent of the gas department of Coast Counties, replacing Mr. Bailey. Elmer H. Fisher, superintendent with headquarters at Pittsburg, has been appointed manager of that company to succeed Mr. Anderson. B. A. Flynn has been appointed as superintendent of that company, to replace Mr. Fisher at Pittsburg.

Builders' Magazine Has Gas Section

BRINGING to the attention of the building industry the outstanding advantages of modern gas service for the four big jobs, the May issue of the *American Builder and Building Age* will carry a special 32-page editorial gas section. The title of the gas section will be "More House for the Money with Gas," tying in with the nationally known slogan of the *American Builder*. The gas section is sponsored by the Home Appliance Planning Bureau of the American Gas Association.

Editorial contents of the section include the following subjects and authors: Kitchens and Basements—Harry Swenson, The Peoples Gas Light & Coke Co., Chicago; CP Range Program—C. W. Berghorn, Association of Gas Appliance and Equipment Manufacturers, New York; Water Heating—John W. Clark, chairman, A. G. A. Water Heating Committee; House Heating and Air Conditioning—Herbert G. Schaul, chairman, A. G. A. House Heating and Air Conditioning Committee, and L. A. Bickel, of Dallas, Texas, formerly chairman (1936 and 1937), A. G. A. Process and Comfort Air Conditioning Committee, Industrial Gas Section; Refrigeration—F. E. Sellman, Servel, Inc., New York; Home Modernization—Charles K. Hirzel, The Brooklyn Union Gas Company; Family Flats—James E. West, Washington Gas Light Company.

In addition to the gas editorial material, the section will include advertisements of many manufacturers of gas appliances and equipment. Copies of the entire section totaling from 58 to 64 pages including the advertisements are being made available to all member companies of the American Gas Association for local distribution. These may be obtained at a cost of 6½ cents each, which includes the imprint of the company name on the front cover. The back cover will carry an A. G. A. advertisement on "Gas for the Four Big Jobs."

At this writing thousands of orders for reprints of the gas section have been received at Association headquarters, following a preliminary announcement. It is expected that more than 100,000 copies will be distributed by local gas companies throughout the country. It is recommended that architects, builders, contractors, dealers, real estate companies, home building and modernization prospects, employees and others be furnished with reprints.

McCarter Medals Awarded for Life Saving

ON March 21 at a meeting in Newark, N. J., of the Public Service Electric Association, McCarter Medals were presented to Barney J. Wemple, Jr., lineman, central division, Public Service Electric and Gas Co., and Matthew L. Kilroe, lineman, Passaic division of the same company. The presentation was made by Jacob T. Barron, vice-president in charge of electric operation, in the presence of 400 members of the association who attended the meeting.

The awards were made for outstanding acts of life saving by the Schafer prone pressure method of resuscitation. Mr. Wemple had resuscitated his wife who had been accidentally overcome by gas on June 7, 1938, when a pan of water boiled over and extinguished the flame on a gas range. Mr. Kilroe earned his medal by reviving a man in Passaic on September 1, 1938.

Both men were honored, along with other



Principals in the presentation of McCarter Medals to Public Service employees. Left to right are, William Maidment, division superintendent; Barney J. Wemple, Jr., lineman; J. T. Barron, vice-president; Matthew L. Kilroe, lineman; M. A. Horan, ass't division superintendent; W. R. Smith, safety engineer

medal winners, at the annual convention of the New Jersey Gas Association at Asbury Park on April 12. Also honored at

the convention, was William Grunewalder, fitter, Newark district, who received a McCarter Medal Bar. This award, which is given to persons who participate in more than one resuscitation, was presented to Mr. Grunewalder for the second time. He has resuscitated three persons.

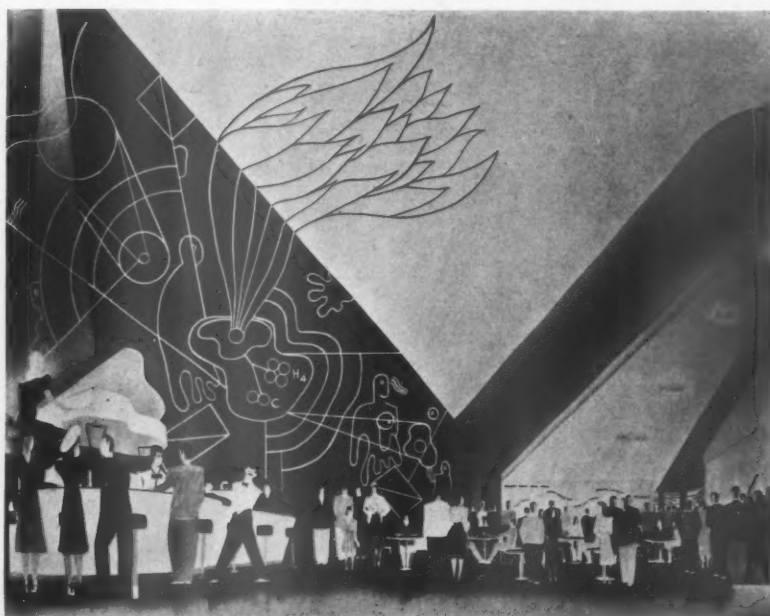
"Court of Flame" Restaurant

FEATURED at the gas industries World's Fair exhibit group is the "Court of Flame" Restaurant. Situated in one wing of the vast exhibition hall, it has facilities for over six hundred people at one time with an outdoor terrace accommodating over 250. An unusual feature of this restaurant, one of the few in this particular exhibit area, is the all-gas kitchen which will be visible and open to the public. It is so constructed that diners will see each of the steps in the preparation of their food.

The artist's drawing shows the 100-foot circular bar at the left. In the center of this bar is a rotating turntable standing above the heads of the bartenders. On this moving pedestal will be an attractive songstress playing at a grand piano.

On one of the large wall panels will be a spectacular mural painted in white on a red background.

The restaurant will be operated by the National Hotel Management Corp., of which Ralph Hitz is president.



Artist's conception of the Court of Flames Restaurant

CP Range Promotion Progress Reported

EXCELLENT progress in the promotion of the CP gas range program was reported by E. V. Bowyer, Roanoke Gas Light Co., Roanoke, Va., at a meeting of all associate regional managers of Region Four of the Domestic Range Committee of the American Gas Association, held April 15 at Richmond, Va. A total of 72 sales managers, gas company executives and dealer representatives were present.

The complete CP program and promotion plans for the year were presented, including the slide film on the Rangers' Club and the CP talkie, "Straight to Your Heart." Following the meeting, the director of the Richmond department of public utilities entertained at a luncheon.

Speaks on Sewage Gas

JOHN B. KLUMPP, consulting engineer of Philadelphia, a past president of the American Gas Association, addressed the New Jersey Sewage Association and State Department of Health and League of Municipalities, March 9, on the precautions to be taken in handling sewage gas.

Mr. Klumpp is chairman of the Association's Committee on Purging Gas Apparatus and was the first chairman of the Association committee which prepared the recommended procedure for purging gas holders. He called attention to the highly specialized study and practice upon which the recommended procedure with respect to gas holders and other apparatus, including pipes, has been based.



Mrs. Luella M. Fisher, right, and Kathryn L. Barnes conducting a "kitchen clinic" broadcast

"Kitchen Clinic" Broadcast

IN Buffalo, N. Y., the Iroquois Gas Corporation is sponsoring a new type of radio program. Named "Kitchen Clinic," it originates once a week from various well-known stores, restaurants, clubs, hotels, and other establishments. It is the only all-gas cooking school broadcast from that locality, with a real as well as a radio audience. The schedule calls for 13 broadcasts from Feb. 15 to May 10.

During the cooking class, which is conducted by Mrs. Luella M. Fisher, home service director, assisted by Miss Kathryn L. Barnes, the host for the day is interviewed, and tells why his establishment uses gas exclusively for cooking, refrigeration, or whatever the case may be.

A prize of a 14-piece glass kitchenware set is given each week for the best recipe sent in. Announcements on range sales, heating offers, and so forth make up the commercials. The four big jobs—cooking, refrigeration, househeating, and water heating—are stressed.

Ready for Tomorrow Utility Reports



J. R. Pershall

booklet is largely pictorial, carrying 34 pages, 10½ inches square, telling the story of the company and the communities it serves. Handsome illustrations and concise text give a clear-cut and appealing pic-

ture of Northern Illinois and, incidentally, the company. Intended to be a source of information for community officials, civic groups, industries, citizens and others interested in the progress of that territory, the booklet has been widely distributed. Not only did it go to every employee of the company and to municipal and public officials but also it was sent to everyone in the territory who was known to have an income of \$10,000 or more.

The company serves 347 communities in Illinois within an area of 6000 square miles adjacent to Chicago.

Wisconsin Public Service Reports Gas Gains

IN a new-style streamlined annual report, noteworthy for its attractive appearance, simplified copy and visual presentation of the company's business, the Wisconsin Public Service Corporation calls attention to substantial gains in its utility service for the year 1938.

Cubic feet of gas sold increased 1.4 per cent in volume during the year, the total sales being 1,098,738 thousand cubic feet. The increase in residential sales was 3.1 per cent, while commercial sales gained 1.8 per cent and industrial sales declined 16.7 per cent. At the close of the year the company was serving 40,265 gas customers, an increase of 1.94 per cent over 1937.

J. P. Pulliam, president, in his annual letter to the stockholders, strongly emphasized the continued rise in taxes, pointing out that the company's tax bill

for 1938 absorbed more than one-sixth of the annual gross revenue and was 91 per cent higher than in 1928. Taxes, Mr. Pulliam pointed out, amount to \$12.29 per customer or \$1,063 per employee annually.

A condensed report, similar to the stockholders' annual report, was distributed to the 1500 employees of the company.

U. G. I. Reports Slight Revenue Dip

THE annual report of The United Gas Improvement Company, Philadelphia, shows operating revenues of utility subsidiaries for the year 1938 of \$107,249,356, a decrease of \$2,288,231, or 2.1 per cent, which decrease was due principally to less revenue from sales of electricity to industrial customers. The quantity of gas sold in 1938 decreased 1 per cent compared with 1937, due to a substantial decrease in sales to industrial customers. Sales to residential customers showed an increase of slightly less than 1 per cent.

The report comments on the research activities of U. G. I. during the past several years, which have been directed towards a better utilization of the chemical possibilities of water-gas tars and their light oil constituents. Sufficient progress has been made to justify the construction of a plant by the Ugite Sales Corporation, a wholly owned subsidiary, to produce these special products in quantities adequate to test their market possibilities, as well as to produce and process a larger proportion of the company's regular tar products.

Gas Appliance Manufacturers To Meet in New York, May 24-26

A TENTATIVE program for the annual convention of the Association of Gas Appliance and Equipment Manufacturers to be held at the Roosevelt Hotel, in New York, May 24-25-26, has been announced by Lucian Kahn, chairman of the Association's convention program committee.

E. R. Guyer, of Chicago, president of the Association, will welcome the delegates at the first general session at 10 A.M. on Wednesday, May 24. At this session, R. S. Agee, sales promotion manager for the Association's domestic gas range division, will discuss sales promotion and its application to the gas appliance industry.

Beginning at 11 A.M. on Wednesday, the various product divisions will hold individual meetings under the chairmanship of their respective chairmen.

The principal speaker at the Thursday morning session will be the Honorable H. Styles Bridges, U. S. Senator from New Hampshire. He will address the manufacturer members on current legislative

trends and how they are affected by national and international events.

Friday's (May 26) general session will be held in the Gas Industries Building at the New York World's Fair. There in the "Court of Flame" Hugh H. Cuthrell, president of Gas Exhibits, Inc., will welcome the convention delegates and outline the predominant part that the gas industry is playing in this great international exposition. At this final session, Saul Cohn, president of the National Retail Dry Goods Association, will speak.

The closing event of this year's convention will be a luncheon to be given for delegates and their wives in the "Court of Flame" Restaurant in the Gas Industries Building at the Fair.

The general program has been so planned as to eliminate any afternoon sessions thus giving visiting delegates an opportunity to visit the World's Fair and to view New York's numerous scenic points of interest.

Personal AND OTHERWISE

Wakelee Named Head of N. J. Public Service



E. W. Wakelee

IN compliance with his request at the March meeting that he be relieved of the presidency, the board of directors of Public Service Corporation of New Jersey April 18 elected Thomas N. McCarter chairman of the board.

Edmund W. Wakelee was elected president and Percy

S. Young, chairman of the executive committee, an office created at the suggestion of Mr. McCarter. Mr. Young is a past-president of the American Gas Association and was recently elected a director of the Association.

The board also elected Thomas N. McCarter, Jr., vice-president in charge of the Southern Division and Robert A. Zachary was made a vice-president. Mr. McCarter, Jr., has been assistant to General Edward C. Rose. Mr. Rose remains a vice-president with headquarters in Newark. Mr. Zachary has been assistant vice-president in charge of public relations. All other executive officers of the Corporation and subsidiary companies were reappointed. William B. Hartshorne, who has been assistant to President McCarter, will be assistant to the chairman of the board.

Mr. McCarter, who has been president of Public Service for the thirty-six years of its existence, will remain the senior executive officer of the Corporation with plenary powers of supervision and direction.

Battelle Appointments

ARTHUR E. BEARSE, chemist, and Howard Peters, metallurgist, are recent additions to the technical staff of Battelle Memorial Institute. According to Clyde E. Williams, director, Dr. Bearse has been assigned to the industrial chemistry division, and Mr. Peters to research in non-ferrous metallurgy.

Dr. Bearse, who received his post-graduate degree from Massachusetts Institute of Technology, was formerly associated with Arthur D. Little, Inc., consulting engineers and chemists, Cambridge, Mass.

Previous to that he was at the Jackson Laboratory of E. I. du Pont de Nemours and Company.

Mr. Peters, a Purdue graduate, was formerly with the Central Indiana Gas Company, and had previously carried on research for the Indiana Gas Association.

Elected A. G. A. Director



Percy S. Young

1935, formerly a director, and has been an active worker on many committees.

PERCY S. YOUNG, chairman, Executive Committee, Public Service Electric & Gas Co., Newark, N. J., has been elected a member of the Executive Board of the American Gas Association. Mr. Young was president of the Association during the year 1934-

James M. Bennett Given New Post



James M. Bennett

public relations department. Mr. Conover for the past 10 years was managing director of the Electrical Association of Philadelphia.

Mr. Bennett, for 30 years a newspaperman in Baltimore and Philadelphia, entered the public relations field in 1920.

He has served as chairman of publicity committees of American Gas Association, Welfare Federation, Philadelphia Chamber of Commerce and Sesqui-Centennial Exposition.

Rahn Succeeds Brown As Milwaukee Head



R. B. Brown

American Rolling Mill Co., Hamilton, Ohio, has been named president of the Milwaukee Coke & Gas Co., succeeding Mr. Brown, while John St. John succeeds to the presidency of the Madison Gas & Electric Co.



Bruno Rahn

after being associated with the East River Gas Co., New York, the Newark Gas Co., and the American Gas Co. During his association with the utility he has served as officer of various associated firms, including the presidency of the American Light & Traction Co. from 1927 to 1935. He will remain on the board of the latter firm until September.

Tattersall New Chairman Advertising Committee

C. A. TATTERSALL, of New York, secretary of the Niagara Hudson Power Corporation, has been elected chairman of the Publicity and Advertising Committee and a member of the Executive Board of the American Gas Association. He succeeds Henry Obermeyer, assistant vice-president of the Consolidated Edison Company of New York.

Mr. Tattersall has been with the Niagara Hudson Power Corporation and its affiliated companies for more than thirty years, serving at various times as assistant to the vice-president and general manager of the Niagara Falls Power Company, assistant to the president of the Buffalo Niagara and Eastern Power Corporation, vice-president of the corporation, assistant vice-president of Niagara Hudson, and finally secretary. He is director and vice-president of the American Management Association, a member of the Empire State Gas and Electric Association and of the Bankers' Club of America.

Law Named Vice-President of Con. Edison



Clarence L. Law

Tapscott, president, and the other officers were re-elected. Charles Nodder was elected an assistant secretary.

Mr. Law has been with Consolidated Edison Company and predecessor companies since November 1, 1906.

Mr. Law is chairman of the World's Fair Committee of Consolidated Edison Company and its associated companies, and has been in direct charge of all matters connected with the companies' building and exhibit at the Fair.

A. P. I. Committee Member

ELMER F. SCHMIDT, vice-president, Lone Star Gas Company, and vice-chairman, Natural Gas Section, American Gas Association, has been appointed a member of the American Petroleum Institute's Central Committee on Measuring, Sampling and Testing Natural Gas and Natural Gasoline. Mr. Schmidt, succeeding F. L. Chase who has resigned will represent the American Gas Association on this committee. F. E. Rice of the Phillips Petroleum Company, Bartlesville, Oklahoma, is chairman of the committee.

Joins Public Service Magazine Staff



William H. Hodge

now owned solely by Mrs. Gonden, who will continue as publisher. Charles W. Battley of St. Paul has been appointed business manager; Robert C. Cleminson remains as editor.

Mr. Hodge will have charge of the edi-

torial policy, circulation and advertising and will maintain a Chicago office in the Civic Opera Building, the principal office being in St. Paul, Minn.

Formerly vice-president in charge of sales and advertising for the Bylesby Engineering and Management Corp., and more recently in a similar position with the Public Utility Engineering and Service Corp., Mr. Hodge has been a prominent figure in utility advertising circles for many years. He is a past chairman of the Publicity and Advertising Section of the American Gas Association.

Directs Display Contest



Raymond M. Martin

Men at the Astor Hotel, New York, June 25-29. A feature of the convention will be the International Display Day, June 28, during which display leaders from other countries are to be honored.

Miss Dillon Director of Red Cross

MISS MARY E. DILLON, president of the Brooklyn Borough Gas Company, Brooklyn, N. Y., and an outstanding woman executive, was elected a director of the Brooklyn Red Cross, to serve for two years, at a meeting April 17.

New Air Conditioning Committee Member

G. F. ZELHOFER Williams Oil-O-Matic Heating Corp., Bloomington, Ill., has been appointed a member of the Industrial & Commercial Air Conditioning Committee, according to an announcement by Frank H. Trembly, Jr., Chairman, Industrial Gas Section.

A chemist and refrigeration engineer of distinction, Mr. Zellhoefer has been largely responsible for the development of the Air-O-Matic combination gas summer air conditioner and winter heater. He is a graduate of University of Illinois, where he was a particular protege of the late Professor Parr.

Connecticut Executives Receive Promotions



R. H. Knowlton

dent in charge of sales, was previously sales manager. William T. Jebb jumped from assistant superintendent to manager of the company's Waterbury division. Charles J. Allen, formerly manager of the Waterbury division, received the newly created position of director of public relations.

Mr. Knowlton has been a vice-president of the Connecticut Light & Power Company since 1927. His entire business career



Charles J. Allen

has been spent in the public utility field. Prior to joining the company as assistant to the president, he served in executive capacities with several utility companies in New York and Pennsylvania. He is a graduate of Cornell University and for many years has been active in the affairs of the New England and national associations of the electric and gas industries.

Mr. Lindsley had been the company's sales manager for eighteen years prior to being raised to his new post. Following graduation from Cornell University, he spent several years with the Westinghouse Electric & Manufacturing company. He entered the utility field in Syracuse and joined the Connecticut Light and Power Company after World War service.

FOUR officers of The Connecticut Light & Power Co., Hartford, Conn., were recently promoted to higher executive posts in the company. R. H. Knowlton was advanced from vice-president to executive vice-president. A. V. S. Lindsley, who was named vice-presi-



A. V. S. Lindsley

entire business career has been spent in the public utility field. Prior to joining the company as assistant to the president, he served in executive capacities with several utility companies in New York and Pennsylvania. He is a graduate of Cornell University and for many years has been active in the affairs of the New England and national associations of the electric and gas industries.



W. T. Jebb

AFFILIATED ASSOCIATION

Activities



George B. Webber

THE twenty-eighth annual convention of the New Jersey Gas Association was held at the Berkeley Carter Hotel, Asbury Park, New Jersey, on April 12. Between 700 and 800 members and guests were present. B. A. Seiple, president of the Association, reported to the convention on the accomplishments for the past year stressing the value of the regional meetings and the cooperative gas exhibits sponsored by the Association. Mr. Seiple also presented to the convention abstracts from the various committee chairmen reports.

Major Alexander Forward then spoke briefly bringing a message from the American Gas Association. Major Forward introduced Conrad N. Lauer, president of the American Gas Association, who addressed the meeting. Mr. Lauer stressed the possibilities for expansion in the gas industry.

Billy Van, Mayor of Newport, N. H., a member of the New England Council and noted lecturer and humorist, unfolded in an interesting and instructive manner the work which has been done to carry on business in the traditional manner in New England.

Safety Medals Awarded

McCarter Medals and National Safety Council President's Medals were awarded by H. W. Nicholson of the Public Service Electric and Gas Company as follows:

McCarter Awards—William Grunewald (bar), Waldo Simonson (medal), John Frank Rodmaker (medal), and Certificate of Assistance to Henry Jensen.

President's Medal of the National Safety Council—James McGrath and Thomas Chamberlain.

At the opening of the afternoon session the Home Service Committee, under the direction of Mrs. Mary N. Hall, chairman, brought into the meeting room, two meals one of which was placed in the oven of a CP range and the other one on a top burner. The range was installed on the stage. The burners were lighted and the thermostat set on the oven; then a big chain was put around the range and locked, the meals, being left to cook while the rest of the afternoon program went along.

J. P. Leinroth outlined the gas industry's

part in the World's Fair and asked the gas industry to make good use of the gas exhibits.

Miss Hilda Torrop, personal adequacy consultant, talked about the individual person's balance sheet.

L. N. Quad presented a paper on profiting by customer complaints. The paper advocated an analysis of all complaints by type with a view toward equipping and preparing the business office representatives for the proper handling of complaints in advance of the actual customer contact.

R. S. Agee, Association of Gas Appliance & Equipment Manufacturers, spoke on the advantages of the CP range to the gas industry. At the conclusion of Mr. Agee's talk the chain was removed from the range and the two meals were removed and put on display.

The following officers for the 1939-40 association year were elected—

President—George B. Webber, Public Service Electric & Gas Co.

1st Vice-President—Frank H. Darlington, Peoples Gas Company.

2d Vice-President—Preston D. Gardner, Public Service Electric & Gas Co.

Secretary-Treasurer—Harry A. Sutton, Public Service Electric & Gas Co.

Directors for 3 years—John A. Clark, Public Service Electric & Gas Co.; L. N. Yetter, Atlantic City Gas Co.; L. W. Becker, Elizabethtown Consolidated Gas Co.; E. J. Menerey, Peoples Gas Company.

Director for 2 years to fill vacancy—Howard H. Melvin, Cumberland County Gas Co.

Mid-West Gas Association

FRED J. GUNTHER, of the Iowa-Nebraska Light and Power Co., Lincoln, was elected president of the Mid-West Gas Association at the annual convention, April 10-12, in Des Moines, Iowa. Mr. Gunther succeeds Sam D. Whiteman, of the Sioux Falls Gas Co., Sioux Falls, S. D.

D. B. Dushane, Jr., of Chicago, Ill., representing the American Meter Co., was elected first vice-president and H. E. Peckham, St. Paul, Minn., was named second vice-president. R. B. Searing of Sioux City, Ia., was re-elected secretary-treasurer.

Elected for three-year terms on the executive council were Harry K. Wrench, Minneapolis Gas Light Co.; K. R. D. Wolfe, Fisher Governor Co.; H. Gilder-

sleeve, Iowa-Nebraska Light and Power Co., and R. H. Garrison, Iowa Public Service Co.

Affiliated representatives to the American Gas Association were named as follows: manufacturers, H. R. Pierce, Sprague Meter Co.; technical section, A. C. Rathkey, Iowa Public Service Co.; industrial gas section, A. F. Willeford, Council Bluffs, Ia.; accounting section, Robert T. Davis, Iowa City Light and Power Co., and commercial section, W. J. Barber, Metropolitan Utilities District, Omaha, Nebraska.

Gas company officials from six states registered for the three-day convention.

Arkansas Utilities Association

ADDRESSES by Thomas R. Weymouth and E. H. Poe, chairman and secretary, respectively, of the Natural Gas Section of the American Gas Association, featured the twenty-eighth annual convention of the Arkansas Utilities Association held at the Arlington Hotel, Little Rock, April 10 and 11. C. B. Wilson, Little Rock, chairman of the Association, presided.

Under the topic of "Moving Forward with Natural Gas," Mr. Weymouth summarized the highlights of the natural gas industry's progress during the past year. He said that the natural gas reserves in this country will last for many years to come and that natural gas service now is available in 34 different states. He mentioned air conditioning in the home as the industry's newest development and one offering great possibilities.

Advocating that each employee in the gas industry should spend at least three hours a week studying his job and his company's business, Mr. Poe reviewed the educational courses now being offered by various companies in the industry. He called attention to a comprehensive survey of employee education courses sponsored by member companies which has recently been completed by the Natural Gas Section. He emphasized the responsibility of management to offer adequate educational facilities and encouragement to its employees.

Canadian Gas Association

THE thirty-second annual convention of the Canadian Gas Association will be held at Hamilton, Ontario, June 6 and 7. J. D. Von Maur, convention papers chairman, has prepared a program of outstanding speakers who will discuss timely subjects, with particular emphasis on sales promotion topics. Plant, distribution and operating subjects, however, will not be neglected.

Their Majesties, the King and Queen, are expected to be in Hamilton on the second day of the convention and gas delegates will have an excellent opportunity

to see the reception accorded them. To insure accommodations, reservations should be made immediately. The Royal Connaught Hotel is headquarters for the convention.

A feature of the meeting will be the address of Zenn Kaufman, noted platform

speaker, at the banquet on the evening of June 6. His topic is "Showmanship in the Canadian Gas Industry."

The entertainment committee has arranged an attractive program of wide appeal.

Maryland Utilities Association



Eugene D. Milener

EUGENE D. MILENER, secretary of the Industrial Gas Section, American Gas Association, was the keynote speaker on the gas group program at the annual meeting of the Maryland Utilities Association, held April 14 at the Lord Baltimore Hotel, Baltimore. Charles C.

Krause, Consolidated Gas, Electric Light & Power Co., chairman of the group, in introducing Mr. Milener, stressed sales—the central theme of the convention.

Pointing out that entire company organizations have become sales conscious, Mr. Milener outlined the part which the American Gas Association is playing in promoting and coordinating the nationwide trend to gas for the "Four Big Jobs." A dramatic portrayal of the importance of gas in everyday life concluded Mr. Milener's address.

The sales keynote was supported by J. Paul Jones in his paper on "Some Sales Promotional Phases in Securing and Holding Gas Load." Mr. Jones, industrial fuel representative, Consolidated Gas Electric & Power Co., pointed out that the watchword of modern business is salesmanship.

J. A. Stoll, Baltimore Transit Co., was elected president of the Association for the new term. Other officers elected at the convention are: Vice-President, Harold Haydon, Potomac Electric Power Co.; Treasurer, R. F. Bonsall, Consolidated Gas, Electric Light & Power Co.; Secretary, J. H. Purdy, Consolidated Gas Electric Light & Power Company.

A. G. A. Proceedings Now Available

ORDERS are now being received at Headquarters for the 1938 Annual Proceedings of the American Gas Association. This year's Proceedings contain approximately 900 pages, liberally illustrated, and carefully indexed as to authors and subjects. The Proceedings are an entire year's accumulation of printed papers, convention addresses, and committee reports. Included also are important discussions which took place at the annual A. G. A. convention in Atlantic City last October.

The Proceedings comprise six divisions grouped under the following headings: General, Accounting, Natural Gas, Commercial, Industrial Gas and Technical.

Orders should be placed promptly as the supply is limited. Address American Gas Association, 420 Lexington Avenue, New York, N. Y. The cost is \$3 to members and \$7 to non-members.

CONVENTION CALENDAR

MAY

- 8-9 Indiana Gas Association
Fort Wayne, Ind.
- 8-11 A. G. A. Natural Gas Section, Annual Convention
Mayo Hotel, Tulsa, Okla.
- 8-12 National Fire Protection Association
Chicago, Ill.
- 11-12 American Management Association
Hotel New Yorker, New York, N. Y.
- 12 New England Gas Association—Operating Division
Hotel Bond, Hartford, Conn.
- 15-16 A. G. A. Executive Conference
Fairmont Hotel, San Francisco, Calif.
- 18-19 Wisconsin Utilities Association—Transportation Section
Pfister Hotel, Milwaukee, Wis.
- 22-23 A. G. A. Hotel, Restaurant and Commercial Sales Conference
Hotel St. George, Brooklyn, N. Y.
- 22-24 A. G. A. Joint Production and Chemical Committee Conference, Technical Section
Rochester, N. Y.
- 24-26 Association of Gas Appliance and Equipment Manufacturers
Roosevelt Hotel, New York, N. Y.

JUNE

- 1-2 Natural Gas & Petroleum Association of Canada
General Brock Hotel, Niagara Falls, Ontario
- 6-7 Canadian Gas Association
Hotel Connaught, Hamilton, Ontario
- 6-8 Edison Electric Institute
Waldorf Astoria Hotel, New York, N. Y.
- 6-9 The Institution of Gas Engineers, Annual Meeting
London, England

* Includes exhibit sponsored by A. G. A. Industrial Gas Section.

- 9 Empire State Gas & Electric Association—Gas Operating Group
Park Central Hotel, New York, N. Y.
- 18-22 Public Utilities Advertising Association, Annual Convention
New York, N. Y.
- 19-22 American Home Economics Association Convention
Gunther Hotel, San Antonio, Texas.
- 29-30-July 1 Michigan Gas Association
Grand Hotel, Mackinac Island, Mich.

AUGUST

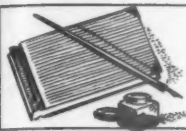
- 9-16 American Transit Association, Annual Convention
San Francisco and Los Angeles
- 21-23 Appalachian Gas Measurement Short Course
University of West Virginia, Morgantown, W. Va.
- 23-25 National Association of Railroad and Utilities Commissioners
Seattle, Wash.
- 23-26 Home Service Conference and Training Course
Chapman Park Hotel, Los Angeles, Calif.
- 28-31 American Dietetic Association
Ambassador Hotel, Los Angeles, Calif.

SEPTEMBER

- Sept. 5-7 Pacific Coast Gas Association
Fairmont Hotel, San Francisco, Calif.
- 9 Gas Industry Day—Golden Gate Exposition

OCTOBER

- Oct. 9 Gas Industry Day—New York World's Fair
- 9-12 American Gas Association, Annual Convention
New York, N. Y.
- 16-20 National Safety Council
Atlantic City, N. J.
- Wk. 23 National Metal Congress and Exposition*
Chicago, Ill.



Accounting SECTION

H. A. EHRMANN, *Chairman*
F. B. FLAHERTY, *Vice-Chairman*
H. W. HARTMAN, *Secretary*

Accounting and Property Records in the Regulation and Management of Public Utilities

IN my state we have no natural gas whatever, and our manufactured gas properties are neither numerous nor large. At the end of 1938 but nine utilities, having an aggregate gas fixed capital of less than \$9,000,000 operated in New Hampshire. These utilities served less than 25,000 customers in 22 communities having a total population under a quarter of a million.

The Commission of which I have the honor to be a member traces its origin to a statute enacted by the New Hampshire Legislature in 1838, making it, according to our methods of calculation, the oldest regulatory agency in the United States. It has had a long, and in the past reasonably distinguished, history. And more recently it has become, I suspect, somewhat notorious in certain circles for a bit of pioneering work in the fields upon which I am to touch today.

Accounting in Management and Regulation

It was my privilege to discuss some phases of the relationships between regulation and accounting before the Accounting Section of this Association at its meeting in Atlantic City in the autumn of 1936. I shall try to avoid repetition of what was said then except as developments have in some respects modified the judgments which were there ventured and as certain of the basic principles then stated may be fundamental to points which I shall try to emphasize today.

Electric Utility Accounting in New Hampshire

In 1936 the electric utilities and the Commission in New Hampshire were really just beginning to become accustomed to a revised Classification of Accounts which had been ordered into effect as of January 1, 1935, following a series of hearings and conferences which, in view of the scope and content of provisions then regarded as unusually stringent, were of a notably and remarkably cooperative character. *Classification of Accounts for Electric Utilities*, 16 N.H.P.S.C. 282 (1934); 17 N.H.P.S.C. 232 (1935). That Classification, applying to 25 companies having at the end of 1938 nearly \$130,000,000 of electric fixed capital, differed from those promulgated by the

By NELSON LEE SMITH

Chairman, New Hampshire Public Service Commission and President, National Association of Railroad and Utilities Commissioners

National Association of Railroad and Utilities Commissioners, the Federal Power Commission, and such state commissions as those of New York and Wisconsin chiefly in two respects.

First, in providing for the carrying on of existing book balances, in so far as substantiated by required studies of fixed capital, with the acquisition adjustment account used only for property acquired after the effective date, the Classification recognizes the function of the books of account to be simply a means of recording as accurately as possible the true and exact financial history of the reporting utility.

Second, by greatly simplifying and reducing the number of the sub-accounts, particularly in the cases of the items of

Fixed Capital and Operating Expense, the Classification, we believe, is better adapted to the needs of our own local situation.

Our utilities are of relatively small scale and we have tried to keep constantly before us the desirability, in the public interest, of keeping the difficulties and costs at the lowest levels consistent with the purposes of sound accounting procedures and with the maintenance of records really adequate to the uses to which they may be put, both by the Commission and by the companies.

The 1935 Electric Classification in addition required Fixed Capital studies over a two-year period to govern the reclassification of operating property and the substantiation of book balances. These studies, in turn, were to constitute the basis for the establishment of Continuing Property Records, incorporating data as to so-called "ab-original cost," and Depreciation Studies, both of which will be alluded to later. It was also understood that these first two years were to constitute a trial period, during the course of which the most glaring faults would no doubt be disclosed and at the

Accountants Hold Lively Spring Meeting

With a long-time reputation for lively and constructive meetings, the Accounting Section of the American Gas Association enhanced its notable record by conducting a highly successful Spring Conference at the Greenbrier Hotel, White Sulphur Springs, W. Va., on April 20 and 21. A strong program covering the major problems of today's utility accountant was presented under the leadership of H. A. Ehrmann, of the Consolidated Edison Co. of New York, chairman of the Accounting Section.

A gratifying registration of approximately 250 representatives from widely scattered sections of the country participated in the meeting. Especial interest was attached to the address of Nelson Lee Smith, president of the National Association of Railroad and Utilities Commissioners,

which is reproduced in full on the accompanying pages. Another outstanding paper was that on "Property Records, A New Field of Endeavor" by Stuart F. Kisters, Stone & Webster Engineering Corp., Boston. This paper and other valuable contributions to the conference will be discussed in the June issue of the MONTHLY.

One of the highlights of the meeting was the presentation of the Customer Bookkeeping plans of three companies under the direction of R. B. Milne, Columbia Gas & Electric Corp., New York. This covered the Unit Desk Plan by O. Ullery, The Ohio Fuel Gas Co.; Station Plan by J. A. Williams, Niagara Hudson Power Corp.; and Unit Group Plan by A. W. Fyfe, Consolidated Edison Co. of N. Y.

Presented before the Spring Conference, Accounting Section, American Gas Association, White Sulphur Springs, W. Va., April 20, 1939.

conclusion of which the entire subject matter would be cooperatively re-examined.

I am happy to be able to say that this procedure was followed as anticipated. The reconsideration provided for, occurred over a period of several months in 1937, during which conferences and hearings were held and many suggestions were advanced and carefully studied. While a number of changes were made to correct and clarify minor matters and to effect a renumbering and rearrangement of accounts for the convenience of utilities conforming to the Federal Power Commission Classification, the only major change had to do with providing for a more adequate treatment of Capital Surplus, *Classification of Accounts for Electric Utilities*, 19 N.H.P.S.C. 465 (1937). These changes resulted in the issuance of a revised Uniform Classification of Accounts for Electric Utilities, effective January 1, 1938. I think it fair to say that both the Commission and the accounting companies are reasonably well satisfied with the result and are thoroughly convinced that such soundness as it may possess is due largely to the cooperative method of its development.

Gas Utility Accounting in New Hampshire

With the experience of the Electric Classification behind it, and with the report of the Accounting Committee of the National Association of Railroad and Utilities Commissioners before it, the New Hampshire Commission embarked in January, 1938, upon a revision of the 1915 Gas Classification, *Classification of Accounts for Gas Utilities*, 20 N.H.P.S.C. 26 (1938). To make a long story short, this task extended over a period of about six months, during which time there were a number of conferences, several hearings, and in general the same sort of entirely cooperative effort that went into the promulgation of the Electric Classification. By a report and order dated June 30, 1938, the Commission prescribed its revised Gas Classification to become effective January 1, 1939, *Classification of Accounts for Gas Utilities*, 20 N.H.P.S.C. 322 (1938).

In underlying theory, as well as in form and arrangement, the Classification for Gas Utilities is similar to the revised Electric Classification. For the convenience of combination companies the General Instructions, Balance Sheet Accounts, Instructions for Fixed Capital Accounts, Earned Surplus Accounts, and Income Accounts are identical in numbering and in text, except as functional differences between gas and electric properties necessitate minor variations. This is substantially true also of the general arrangement, grouping, and content of the Fixed Capital, and Operation and Maintenance Accounts, although the numbers used in the Gas Classification bear the digit "1" prefixed for more ready identification as gas accounts. Corresponding provisions are made for studies of Fixed Capital, Adjusting Journal Entries and Depreciation Studies, and the establishment of Continuing Property Records, all to be filed not later than January 1, 1940. The

period to January 1, 1941, is specifically recognized as one of trial, with consideration to be given to proposed modifications at that time. It is of course too early to predict what the results under the new Gas Classification will be. At present the companies are engaged in the reclassification required to conform to it and interpretative rulings are frequently being issued by the staff of the commission. There appears to be, however, no reason for supposing that the outcome will fail in any wise to be as mutually satisfactory as has been the case under the Electric Classification.

Objectives of Cooperation

My purpose in thus detailing some developments in New Hampshire has been, not to strike a blow for the home state, so to speak, but simply to illustrate and to emphasize as forcefully as I can this proposition: that there is no necessary conflict between the regulatory and the corporate purposes of utility accounting. For both purposes the main objective must be the same, a sound system of records accurately disclosing the true financial history of the utility in such detail as can be usefully accomplished, bearing in mind not only the fact that accounting is an indispensable tool to both management and the regulatory authority but also the equally important fact that figures and schedules cost something and that the cost must ultimately be borne by the rate-payers.

It is my firm belief that in the past much misunderstanding and no little litigation has stemmed from a failure, on one side or the other, or perhaps on both, to recognize these principles as fundamental. I cite our experience in New Hampshire merely to show that such conflict is not inevitable—and I hasten to add that I don't believe that the officials of utilities operating in our state who are in this room regard us as being quite in the "push-over" class, either.

Even when the Fixed Capital studies referred to above have disclosed as much as \$300,000 of unsubstantiated book values which have had to be eliminated, I think management has been convinced that its long-run best interests, as well as those of the public, have been served by the write-off of property no longer in service, when that write-off has been accomplished in a reasonable fashion in connection with capital re-adjustments.

I am glad that this belief in the validity and value of the cooperative process appears to be gaining headway. The very able chairman of the NARUC Committee on Statistics and Accounts of Public Utility Companies, Dr. Morehouse of Wisconsin, referred to its importance in his splendid address at the Chicago joint meeting of the Edison Electric Institute and American Gas Association Accountants last December, which many of those present today no doubt heard. I trust that you will heed his counsel when he stresses the fact that management, if for no other reasons than those of "enlightened self-interest," must under modern conditions be prepared to consult freely with regulatory agencies and

to approach in a liberal and broad-minded fashion the problem of reasonably reconciling differences.

From what I have seen of the state and federal agencies represented in the National Association I am convinced that there will be no question of their willingness to meet your efforts along these lines in an entirely open-minded and fair manner. For my own part, let me assure you of my deep interest in progress of this sort. Not only in the activities of the Accounting Committee, but also in the work of other groups within the National Association, I believe you will find this same spirit, which has already been translated into action by committees dealing with the important matters of Depreciation and the formulation of proposed uniform rules for the construction, filing, and posting of Tariffs in consultation with similar groups representing the industries concerned.

Continuing Property Records

The subject of Continuing Property Records is very much alive these days, I understand, in managerial, as well as in regulatory, circles. There can be little doubt that the trend among commissions is toward requiring their maintenance, just as it has been in recent years toward their voluntary establishment by the utilities. In other words, their value as an aid to both management and regulation seems to be pretty generally recognized and it seems fair to say that only the cost, or fear of excessive cost, has prevented their virtually universal adoption. Thus it seems hardly necessary for me to enter upon a detailed exposition of their usefulness. I shall merely summarize a few of the ways in which we have found them helpful, and in so doing I shall assume that at least tentative assent may have already been given to the proposition that, under proper conditions, fundamentally what is useful to the regulatory agency is of value to management, and *vice versa*. I shall have to ask your forbearance with my inexpert approach to the problem and in my reliance upon material drawn from experience in New Hampshire, where we already have had such records in full operation for more than two years in the case of the electric utilities and where the basic work is now being done on the gas properties.

Purposes and Uses

Originally the New Hampshire Commission conceived its Fixed Capital Study and Continuing Property Record requirements primarily as an aid to adequate accounting. The work on electric utilities was originally undertaken in 1934 and 1935 in connection with the revision of the Electric Accounting Classification to serve as a check upon reclassifications of property and existing book balances, as well as to afford records of original cost which were deemed essential but to which basis it was not intended to re-write the books of account. That it has proved useful in these respects has been indicated earlier in this paper. Property retired in fact but not from the books has been disclosed; in some cases

assets have been found which did not appear in the records of the owner. Similarly, and in conjunction with the required Work Order System, it was anticipated that it would be, and, as supplemented by spot-check field audits, it has proved to be, of value in connection with current additions and retirements. Both the Commission and the utilities, I believe, can place more reliance than formerly on the unit prices used for retirement purposes.

As the work has progressed, many other important uses for these records have become apparent. Obviously such a running record tremendously simplifies the work of appraisal in any proceeding, whether formal or informal, in which such a valuation is desired by either the company or the Commission. Its existence permits "horse-back estimates" to be made as rough and ready guides in informal negotiations simply from records in the office supplemented by field checks and available knowledge as to physical conditions. When more elaborate data as to values are necessary for purposes of formal proceedings, not only is there a substantial saving of time and expense because of the ready availability of data as to both physical units and unit prices, but there is a distinct gain to all concerned in the fact that there is agreement in advance at least as to the factual question of units of property in service. Thus valuable data collected in the course of previous appraisals is not permitted to become obsolete through non-use, and outlays for such work are no longer simply pitched out of the window. Controversy, therefore, can be confined to the more speculative questions of pricing and depreciation.

It seems unnecessary to elaborate upon the uses to which these appraisals can be put in connection with such matters as rates, securities issues, and, if the records are properly designed for the purpose, taxes. In connection with extension of service, too, the basic data and maps showing locations and capacities of circuits and transformers have been of value both to the companies and the Commission, as for example, when a survey for purposes of rural electrification was undertaken in 1935 and 1936. This Survey, used frequently by the Commission and by the electric utilities, can be kept current through utilization of the annual reports of property changes and the field checks made in connection therewith.

One of the most interesting uses to which the Continuing Property Record is being put in New Hampshire has to do with the increasingly prominent subject of Depreciation, in which both state and federal commissions appear to be showing more and more concern, if inquiries coming to our office are any criterion. The language of both the old and the new New Hampshire Classifications is quite specific in its requirement of depreciation, as contrasted with retirement, accounting and in its inclination toward the straight-line method. The revised Classifications provide for the determination of rates by major classes of

property and for the filing by the utilities of studies supporting the rates which they select. This is not to say that the Commission intends or wishes to prescribe rates of Depreciation if that can be avoided. It means simply that we expect factual substantiation of the rates which the utilities choose to adopt.

The studies which have been thus developed are most interesting and, we believe, throw considerable light on the survival-life method, which is generally being followed in New Hampshire in deriving rates of Depreciation. There is no thought that the studies thus far developed are conclusive. They relate to current charges rather than to past accruals. Here again we are proceeding tentatively. But it is hoped that continuation of these studies over a period of years will produce some really enlightening results in a rather obscure field. And it is obvious that Continuing Property Records are essential if useful studies of this sort are to be maintained. The desirability of understanding and agreement upon reasonable accuracy as a mutually satisfactory objective is clearly apparent.

Principles and Costs

You will note that I have spoken of reasonable accuracy. The term was used deliberately, for I think it requisite to recognize the fact that there are limits beyond which it is not feasible to go in quest of accuracy, and realms into which, regardless of what might be theoretically possible, it would not be profitable to enter in view of the value of the result when compared with its cost. This principle, if such it may be called, explains several characteristics of our work with Continuing Property Records.

In the first place, it is most important for the regulatory authority to recognize that such Property Records have their definite and important functions from the standpoint of the operation, accounts, and engineering records of the reporting company. Just as we all have our own peculiar tastes in such personal items as neckties, so utilities have their own systems of management and records which they believe to be adapted to their own requirements. There is no omniscience or other quality which justifies a commission in prescribing detailed methods or in interfering with the choices of management in respect to these matters unless that is necessary to insure that accurate and adequate data will be forthcoming. In other words, it has seemed to us that our requirements should run to the scope and character of the results rather than to the routine whereby they are produced.

By the same token, the question of the units to be employed bears importantly upon both the value of the result and its cost. Theoretically perfect accuracy might appear to call for an inventory broken down to the smallest possible physical unit and for the assignment of individual dollar values, if such are included in studies of Fixed Capital, specifically identified for

purposes of retirement with each and every individual physical unit. I question whether in practice an attempt to produce such meticulous accuracy would accomplish its purpose. Too many uncertainties enter into the picture to give assurance of the result; and perfection is not achieved through a multiplication of errors. We have believed that the main purpose can be reasonably served through the employment of average prices assigned to groups of substantially similar units and that the units themselves should be established with regard to actual practice as to their installation and retirement.

Speaking broadly, the unit of physical property should be fine enough to permit exact identification but large enough to allow for a practical handling of the records without undue additions to personnel. Within the general limits thus established, the exact units must be determined in a flexible manner adjusted to the purposes of the record and the procedures of the reporting utility. Thus, although lists of units are appended to the New Hampshire Electric and Gas Classification, these units are suggested, not prescribed. A few copies of these Classifications, together with the forms used for the reporting of property changes, are available here if anyone should be interested in examining them. It is anticipated that as experience is accumulated, both by the Commission and by the companies, the desirability of many changes in procedures and details will be demonstrated. These will have to be considered in an open-minded way.

It is reassuring to note that a similar view seems to prevail in the Federal Power Commission with respect to the many companies following its accounting requirements which have themselves established Continuing Property Records, and with respect also to its so-called "original cost studies." Thus, in a letter dated February 27, 1939, and released by the Edison Electric Institute, restating his position as expressed at the December meeting of public utility accountants in Chicago, Charles W. Smith, Chief of the Bureau of Accounts, Finance and Rates of that Commission, says in part:

"Continuous property records have as their function the showing at all times of the properties owned. The detail in which such records are kept varies from company to company, depending upon all the purposes to be served thereby. Their purpose being different from retirement units, the definition of units need not be the same, although for some classes of property the same definition might be advisable. Continuous property record units frequently contain minor items, which, by being minor items alone, are excluded as retirement units. On the other hand, a structure may be listed as a continuous property record unit in its entirety, while for retirement and replacement accounting purposes (retirement units) it may consist of many units.

"An operating unit is difficult to define, but relatively easy to determine in practice. Examples of operating units are

(Continued on page 199)



Commercial SECTION

F. X. METTENET, *Chairman*
DAVIS M. DEBARD, *Vice-Chairman*
J. W. WEST, JR., *Secretary*

Gas Refrigerator Promotion Begins at Home



H. Carl Wolf

THE high standing of the gas refrigerator today—its general acceptance by the public and its almost universal inclusion in gas company sales plans—give credence to the statement that it has been promoted and promoted well. Yet we are on a new plane of living, of buying, of selling with new problems before us. A distillation of all the problems that lie ahead in gas refrigeration promotion might well give rise to one comprehensive question "How can we best, most practically and most economically increase the tempo of customer acceptance of the gas refrigerator?"

Superior Performance

It does not take an expert to tell us that the gas refrigerator of 1939 is the best mechanical refrigerator that has ever been built. Impartial judges testify to its beauty. Our laboratories have proved its refrigerating qualities. Even a cursory study discloses its possession of those qualities on which every gas man dotes as reasons for the superiority of all gas appliances—long life, quietness, economy and modernity. If the late Chas. P. Steinmetz, the eminent electrical engineer, is correctly quoted and is correct in his quotation that the refrigerator of the future would be the gas refrigerator, then the gadget worries that have been tripping stones along our sales pathway should melt away into a broad highway of confidence along which our sales promotion plans should take us in accelerated strides.

It might not be amiss to suggest that gas refrigerator promotion must begin at home—with the manufacturing organization at Evansville, the gas company executive, the salesmen, the entire company personnel. Let us explore for a minute this brash suggestion.

Relations between the gas man and the gas refrigerator man may not have always been as smooth as they might have been, but I think we now can just about close the book on those petty differences which

Presented before Southern-Southwestern Regional Gas Sales Conference and Southern Gas Association Convention, S.S. Rotterdam, March 23, 1939.

By H. CARL WOLF

*President, Atlanta Gas Light Company,
Atlanta, Ga.*

acted as a brake on refrigerator sales. The manufacturer still has some rough edges to work off, of course, but forgetting the manufacturer's problems, the plain truth is that the 1939 gas refrigerator has struck such a neat balance between improvement and price that it has about taken the wind out of our blasting sails. And in this latest price concession, wherein has been eliminated the differential between apartment house and other installations, I believe that Servel has given us a challenge which, gentlemen that we are, we will accept by deluging the refrigerator market and thus



SYMBOL of the 1939 Man-the-Sales contest conducted during April, May and June by the Refrigeration Committee of the American Gas Association, headed by R. J. Rutherford, chairman, the Yankee clipper ship sketched above is headed for three Ports of Call, namely (1) The Port of Old Icebox Users; (2) The Port of New Homes and Apartments; (3) The Port of Obsolete Mechanical Refrigerators. These represent the three great markets being attacked in this nationwide campaign.

With an enrollment in this year's campaign greater than a year ago, the preliminary "rigging up" contest during March, resulted in 231 prize-winning salesmen selling an average of more than 2 refrigerators above the record set by the March winners last year.

prove to the manufacturer that all of our talk about lower prices has not been just idle chatter.

When the officers and directors of the Southern Gas Association planned this meeting and stressed attendance by gas company executives, I think another important step was taken in gas refrigerator promotion. If this job is going to be done, enthusiasm for it must start at the top. Why any gas company executive should not be four square behind gas refrigerator promotion is a mystery to me. Back when we had to finance our own appliance sales and tie up several hundred dollars of hard-to-get cash for an appliance that gave us, in many cases, practically no net earnings, there was some excuse for lagging interest. If any company is confronted today with that problem, however, the work of the new A. G. A. Committee on Appliance Financing should be helpful.

Employee Education

Employee cooperation which leads to added sales begins with employee education—actual knowledge of the gas refrigerator and its inherent advantages. I may be pardoned for telling of two activities of our company which we are confident will be vital contributing factors along this line. Several years ago, the supervisor of our laboratory prepared a service manual covering every detail of appliance servicing and delving into numerous engineering and scientific facts relating to gas and gas appliances. This manual, to consist of three volumes, two of which are finished, was copyrighted and published and became the basis for our service school.

We are now in the third year of that school, getting deeper all the time. Every member of the fitting department, with few exceptions, has been spending two hours a week in class—except during the hot months—in addition to study time at home. Some classes begin at 7 in the morning, others run till 7 in the evening—all on employee time. All men are carefully graded and their grades have had a bearing on their earnings. These men have thus learned the inside story of gas appliances; familiarity has brought enthusiasm.

We are just embarking on what I think is one of the finest things that has come to the gas industry in a long time—the A. G. A. Sales Cooperative Course. In spite of the service school just described, in spite of night schools and colleges which many of our employees are attending, in spite of

a number of other conflicting dates, over two-thirds of our employees in Atlanta have enrolled in this course and are genuinely enthusiastic about it.

If these two employee education endeavors alone, without any other promotional efforts, do not cause us to reach our ambitious sales goal for 1939 then I do not know gas company employees.

Dealer Cooperation

The dealer has a real place in the promotion program, more important in some localities than in others, but always important. I believe that it is the responsibility of gas companies to develop dealer cooperation, with the full backing and assistance of Serval, to the end that dealer activities shall be properly coordinated with company endeavors. If the dealer could and would take over the business in its entirety it would be well, but until a strong dealer organization is built up to sell primarily, secondarily and even tertiarily, gas refrigeration, we must keep in touch with the situation for our own protection.

There is no doubt that dealers are a lot smarter merchandisers than are we. They have an established clientele and strong positions in the community. What they lack are first, confidence in us; second, facilities for adequately servicing gas appliances and third, knowledge of the inherent advantages of gas appliances.

Our so-called competitors in the refrigerator business have brought about a demoralized retail condition as a result of over-exploitation, unsound promotion and excessive trade-in allowances, but they have succeeded in making the dealer believe that there are other fuels more modern than gas, more economical, safer and simpler. Our job is to teach the dealer the truth. We must then prove our good intentions by adherence to the highest ethical merchandising standards and assist him in every feasible way to make money.

But by assistance I do not mean assistance which costs us money. I am most decidedly opposed to underwriting any dealer and even more opposed to trying to lead him to think we are giving him something for nothing. There are so many things

we can do which cost us little or nothing or at least no more than if we were selling appliances ourselves. We might arrange a financing plan which permits the dealer to offer the same terms we do. We might arrange to collect for the appliances on our gas bills. We might attempt to educate his employees and sales force as to our appliances and products. We might even install appliances at or near our cost. We can most certainly agree to service the appliances for that we would do under any circumstances. Then we can keep our prices at a level which, with good clean competition, the dealer can meet and yet make a profit. Dealer cooperation developed under such conditions, I consider sound.

From a presentation standpoint, gas refrigerator promotion in the past has taken largely the form of campaigns of one sort or another. An excellent one is planned by the A. G. A. Refrigeration Committee for this year. Some of these have been effective, some merely spectacular. The question often comes to my mind—if we do not spend too much time and energy in cleverness and spectacular stunts and too little on syste-



confronted with a long series of clever cooking campaigns by our principal competitor. It occurred to our people that it had been sometime since anybody had talked much about selling ranges which would simply cook food better. It might have been the novelty of the idea which appealed most, but in any case we ran a campaign of education. Our advertisements all read "Let's Get Down to Brass Tacks." The idea took hold and for months the expression enjoyed a revival which was rather extraordinary. We actually talked about cooking food. Just plain good food, and it was one of the most successful range campaigns we have had. The significance of this story is that it indicated to us clearly that the public will respond to honest, old-fashioned selling.

Actually what I have said applies to almost all types of selling, but I think it applies with particular force to selling gas refrigerators. The gas refrigerator, the very best automatic mechanical refrigerator that money can buy, has not one but a number of points of superiority over any other refrigerator which set it apart distinctly in a class by itself and completely out of the class of so-called competitors.

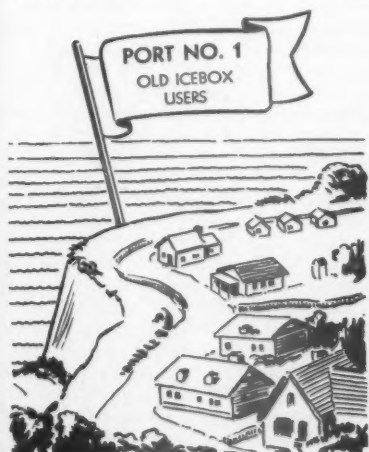
It is not a cheap refrigerator and its price is in keeping with its quality. To the average family who buys one it represents a considerable investment and usually a considerable proportion of that family's investment in home equipment. Its purchase is a serious matter to be considered carefully and gravely. The family who buys one has a right to expect that the salesman will recognize that it is an important matter, that it is nothing to be flippant or humorous, or casual, or clever about.

Now since the gas refrigerator has basic inherent features and qualities which set it apart from electric refrigerators, on a higher plane and with a higher standard of performance and economy, doesn't it follow that probably the most important thing to remember in promoting its sales is that we must keep it separate and apart in the public mind from any other type of refrigeration?

matic, sober plodding hard work. We need to be smart, clever, spectacular, if we are to stand out from the crowd and create interest in our product but we need to be basically sound and to apply ourselves if we are to capitalize on this interest created.

Selling gas refrigerators is hard steady work just as any other job from which dependable results are to be secured. This means starting in the early morning and working until late at night. It means study and hard study how to do the job well. It means learning to know people, to understand how they are apt to think and to recognize what they are thinking. Too often salesmen think that they know these things instinctively and that there is no necessity of applying themselves to the sober job of learning the real story of the magic flame which one never hears. But the salesman who is to fit adequately into this gas refrigerator promotion picture which I am trying to piece together here is the one who has welded into his very fiber the Boy Scout motto "Be Prepared."

Before I came to Atlanta, where under the shadow of the TVA we have had very active competition, our company had been



erator, and that we must not allow our competitors to be successful in their natural efforts to make our prospective customer regard this as just another mechanical refrigerator.

How we may accomplish this separation of the gas refrigerator in our customers' minds from any other refrigerator is a fair question. I think the answer lies not in any one thing, unless it be in keeping it very distinctly in our minds so that our advertising, our sales talks, our promotion, and our sales efforts generally, will naturally be different. I think that the style, the approach, the makeup, the typography and illustrations of our advertising should be entirely different and distinctive, and this difference should be accentuated wherever possible in the direction of dignity, quality and good taste, and that our statements both in selling and in advertising should be such as to accentuate these points.

Advertising Appeal

To be more specific I think gas refrigerator advertising should use ample white space, the arrangement of the copy be not cramped, and the design of the ad itself be pleasing to the eye without regard to the subject matter. If, for example, we tell our customers that the gas refrigerator is the best and highest quality domestic refrigerator on the market and tell them that in an advertisement that is crowded, ill designed, and looks like a haphazard hodge-podge of type and illustrations, I doubt if that advertisement will carry conviction. The choice of language in an advertisement should, I think, carry out the same point; using restraint, avoiding flamboyant language and making statements simply and without exclamation points, either actual or verbal, are important.

It is very easy to read the advertising of our competitors, which for the most part is excellent for their purpose, and either consciously or sub-consciously become disturbed about it, then in our own advertisement attempt in effect to answer theirs rather than to sell our own product.

The gas refrigerator is the only refrigerator on the market which cannot possibly make a noise. It is the only mechanical refrigerator on the market which does not use a compression pump and a motor to circulate its refrigerant. The practical absence of moving parts means the practical absence of wear. It should be, and unquestionably is, the most economical refrigerator from the standpoint of upkeep. Except under most unusual rate conditions, it has the lowest operating cost.

Now these are selling points, and very excellent selling points, that no one else can possibly use. You may be quite sure that if our competitors had any one of them they would make us awfully sick of them. By the very process of sticking to our knitting, advertising and selling what we have and not being too much concerned with what our competitors have and advertise, we automatically achieve the distinction between the gas refrigerator and all other refrigerators that I think is clearly so desirable.

One other point which I think is well worthwhile and which we probably do not make full use of is the fact that as a general thing gas company service is everywhere recognized as better service than that of its competitor. If this happens in some place not to be the case that situation certainly should be changed. A gas refrigerator, therefore, purchased from the gas utility or from a cooperating dealer and placed in use upon the gas mains is in a very highly preferred position with respect to service, for the gas utility, like it or not, is responsible for its performance and will see to it that this performance is satisfactory. Other refrigerators purchased either from a dealer, a hardware or department store, are more or less step-children on the lines of the competing electric company, even where its service generally is as dependable and satisfactory as that of the gas utility.

With this gas refrigerator promotion picture thus keyed into place by the striking superiority of the product we have to sell, I will let myself out on the end of a limb

by suggesting that we attempt a new tactic. Instead of selling the gas refrigerator to the customer, let us educate the customer to acquire the gas refrigerator by the process of selective purchasing. Most people resent being sold anything whether it be life insurance or mouse traps but one actually boasts of the things he thinks he has purchased. Selling has led us into many storms. The puritanical New Deal has attempted to substitute the word "Seller" for the word "Buyer" in the old adage "Let the Buyer Beware"; but if a purchaser is educated as to the real qualities of an article, no need for anyone to beware.

We have a line of appliances designed to promote health, happiness and renewed faith in the American home. At the top of the list stands the gas refrigerator. May I earnestly suggest that by executive enthusiasm, employee education, dealer cooperation, salesman training, high merchandising standards, effective advertising and ceaseless educational efforts we turn our gas refrigerator promotion guns toward encouraging the customer in selective purchasing.

Southern Gas Convention Stresses National Sales Problems



President Lauer addressing the Convention on board the S.S. Rotterdam

COMPETITION in the gas industry is not limited to the vendors of other fuels and services, Conrad N. Lauer, president of the American Gas Association, told the joint Southern Gas Association Convention—Southern Southwestern Regional Sales Conference held on board the S.S. *Rotterdam*, March 19-24. It includes "every industry and every business bidding for the consumer's dollar, most of whom are conducting their advertising and sales promotional activities on a national scale." This fact, he pointed out, has made more significant the growing appreciation of the

necessity and value of national cooperation among all factors in the gas industry.

Mr. Lauer was the principal speaker at the opening session of the convention which was held on board the S.S. *Rotterdam*, March 19-24, during a cruise to Havana, Cuba. More than 250 gas people attended this unique and successful meeting.

H. G. Bonner, president of the Southern Gas Association, directed the convention sessions, while the residential sales conference sponsored by the Commercial Section of the American Gas Association, was conducted by A. M. Spencer, Georgia Power Company, Columbus, Georgia. The latter program was devoted largely to promotion of the CP gas range, with secondary attention to refrigeration and water heating. An able discussion of gas refrigerator promotion, presented by H. Carl Wolf, president, Atlanta Gas Light Company, is reproduced in full elsewhere in this issue of the MONTHLY.

C. H. Zachry, Southern Union Gas Company, Dallas, Texas, was elected president of the Southern Gas Association at the meeting. Other newly elected officers are: C. B. Wilson, Arkansas-Louisiana Gas Company, Little Rock, first vice-president; H. Carl Wolf, Atlanta Gas Light Co., second vice-president; Streuby Drumm, New Orleans Public Service Inc., secretary-treasurer (re-elected).

Highlight of the final general session, Friday morning, March 24, was the address of Merrill Davis, executive vice-president, S. R. Dresser Manufacturing Co., and past president, A.G.A.E.M., urging full coordination between gas companies and manufacturers to make the most of the industry's

opportunities for expansion. These opportunities, Mr. Davis listed as, first, the vast replacement market waiting for cultivation; second, new construction developments offering a great potential market for gas and gas appliances; third, the chance to acquire additional sales coverage through aggressive dealers.

Mr. Davis commended the foresight of the industry in developing the CP program. He said, "we feel certain that our CP trademark is timely."

E. H. Poc, secretary, Natural Gas Section, American Gas Association, addressed the convention on the scope of the new Federal Natural Gas Act.

The industrial gas sales conference under the chairmanship of A. B. Banowsky, United Gas Corp., Houston, brought out the latest developments in this field. Mr. Banowsky reported on the national activities of the Industrial Gas Section of the American Gas Association.

J. L. Foster, Lone Star Gas Co., Dallas, chairman of the S.G.A. Technical Committee, presided at the technical sessions. The outstanding paper at these meetings was that on "Transmission System Leak Inspection," by J. A. Martin, Lone Star Gas Company.

New York—New Jersey Gas Sales Conference



J. P. Leinroth

J. P. Leinroth, Public Service Electric and Gas Company, Newark, New Jersey, is chairman of the council in charge.

Topics to be covered at the morning and afternoon sessions on these days include: Trends in Residential Consumption and Their Significance; Gas at the 1939 New York World's Fair; a Symposium on Housing; Water Heating; Training Salesmen; The Swing to Gas Refrigeration; Home Heating; Meeting Competition with CP Ranges; and a Home Service playlet.

Among those invited to address the conference are: C. E. Paige, president, The Brooklyn Union Gas Company; John B. Reid, co-chairman, A. G. A. Committee on Market and Economic Research; Hugh Cuthrell, president, Gas Exhibits, Inc.; editors of Architectural Forum and American Builder; representative of the Federal Housing Administration; several builders utilizing gas for the four big jobs in their home developments; R. A. Fawder, Consolidated Edison Company of New York, Inc.;

B. A. Seiple, Jersey Central Power and Light Co.; Harold Coleman, The Brooklyn Union Gas Company; H. S. Christman, The Philadelphia Gas Works Co.; H. G. Schaul, Westchester Lighting Co.; and O. F. Flumerfelt, vice-president, Iroquois Gas Corporation.

Film Promotes CP

A NEW sound slide film, "Straight to Your Heart", sponsored by the Domestic Range Committee of the American Gas Association, has received wide acclaim wherever it has been shown and has been labeled one of the most effective contributions to sales promotion of CP gas ranges. The film is packed with sales-making facts, phrases and methods. It is available to all member companies of the Association at a price of \$12.00 each.

New "Home Calls" Book Tells How to Do It

THE Home Service Committee of the American Gas Association has published a new book on "Home Service Home Calls." In 44 pages, it presents a distillation of ideas that have worked and are accepted as standard practice in many companies throughout the country.

Superceding an earlier booklet on the same subject, published in 1931 by the Association, the latest edition contains the results of actual experience on types of home calls; their preparation and procedure; home call habits; suggested approaches; and questions and answers on domestic gas equipment. The text has been checked for accuracy by representa-

tives of the A. G. A. Testing Laboratories, gas service engineers and sales managers.

A necessary handbook for home service departments, this study covers an important function of gas company service work. Reflected in this book is the fact that attitudes and techniques of home call work have changed to become more sales-slanted—unobtrusively but nonetheless definitely.

Copies of "Home Service Home Calls" may be obtained at a price of 20¢ each from the American Gas Association, 420 Lexington Ave., New York, N. Y.



Pauline Schofield, of The Ohio Fuel Gas Co., Mansfield, Ohio, demonstrates Home Call technique



R. J. Rutherford, chairman, A. G. A. Refrigeration Committee, which is conducting a nationwide "man-the-sales" contest, and four former chairmen of the committee, receive the tribute of more than 400 delegates at a meeting of the sales division of the New England Gas Association in Boston, March 31. Left to right, are: Hall M. Henry, J. J. Quinn, Mr. Rutherford, Cyrus Barnes and H. R. Sterrett. The meeting enthusiastically endorsed the campaign which closes July 1



Industrial Gas SECTION

F. H. TREMBLY, JR., *Chairman*

F. T. RAINEY, *Vice-Chairman*

E. D. MILENER, *Secretary*



An attentive audience of 175 industrial gas leaders at the sales conference in Cleveland, March 27-28

Industrial Gas Sales Conference Features New Discussion Technique—and Gets Results

SAVING its real wallop for the final curtain, the Industrial Gas Section scored a smash hit with the 175 industrial gas leaders who attended the Conference on Industrial Gas Sales staged March 27-28 in Cleveland, Ohio. Undisputed headline act of the meeting was the closing innovation on the program—an afternoon of rotating panel discussions.

Held at the same time in the same great hall, these rotating panel discussions allow those interested in two or more subjects to move from one discussion group to another. Each group sits informally around a table and participates in a rapid-fire exchange of questions and information.

Five of the most active committees of the Section formed a nucleus for the discussions which covered the following fields: Ferrous Metals, Non-Ferrous Metals, Ceramic Industries, Food Industries, and Industrial and Commercial Air Conditioning. Committee chairmen who led the discussions were: Clayton S. Cronkright, Ralph D. Hawkins, George M. Parker, T. W. Halloran, and Charles R. Bellamy. The Industrial and Commercial Air Conditioning table drew the largest number of participants (45 at the time of one count) while groups varying from 10 to 25 maintained lively discussions at the other tables.

Lead off man of the 12 speakers who addressed the conference was O. N. Sellers, Sellers Engineering Co., Chicago. Mr. Sellers produced case history evidence to dem-

onstrate the value of his advice on "Capitalizing on Immersion Tube Boilers and Water Heaters."

The engineering improvements incorporated in such equipment, according to this manufacturer, mean that today immersion boilers and immersion water heaters are guaranteed to be as least 80% thermally efficient. Further it is a practical impossibility to convert installations to oil. Therefore, they "offer a means for the gas man

virtually to reduce the rate of gas to his customer without such reduction costing the gas company one cent."

In summary it was pointed out, "In so doing (specifying immersion tube equipment) you should be able to save your customers ordinarily 25 or 30% in gas for a given job, and at the same time place equipment which cannot easily be converted to competitive fuels."

Dowtherm—Key to New Markets

A "new tool for the industrial gas engineer in solving the ever-increasing problems of industrial process work"—the Dowtherm boiler—was evaluated for sales possibilities by D. A. Campbell, Eclipse Fuel Engineering Co., Rockford, Illinois. He defined the Dowtherm boiler as a high temperature, low pressure, vapor phase heating system, and showed how it could "not only improve and extend the use of gas in industries which now use our product, but carry gas heating into new fields as well."

Some six recent installations were described in considerable detail, and numerous others were mentioned in connection with analyses of markets. Several of these were in the chemical process field "where solid and liquid fuels have dominated for years." Others illustrated what could be done with the new equipment by way of invading the paper industry, the plastic moulding field, and the asphalt products business. In one



Wendell E. Whipp, president, National Machine Tool Builders Association, addresses the Monday luncheon meeting. He is flanked by C. E. Gallagher, president, The East Ohio Gas Co. (left), and Frank H. Trembly, Jr., of Philadelphia, chairman, Industrial Gas Section

case (varnish cooking) a 50% savings in fuel costs over direct gas firing was demonstrated.

Shifting the attention of the conference from new industrial equipment with which to court new markets, C. F. deMey, Chairman, A. G. A. Rate Committee, introduced the vital subject of "Practical Rates for Industrial Gas Service." Mr. deMey's significant paper was reproduced in full in the April issue of the A. G. A. MONTHLY.

"We Must Depend Upon OURSELVES"

Adjourning to luncheon in the Pine Room, the conference heard Wendell E. Whipp, president, National Machine Tool Builders Association, and president, Monarch Tool Company, explain that the gas industry and the machine tool business share essentially the same problems and the same objectives. The job is to "produce more goods for more people . . . to render a service to the ultimate consumer." In conclusion, he stated, "In these days of political confusion, we must depend upon ourselves—upon our individual efforts and resourcefulness."

Recirculation Heating—Where and How

Edward Stephenson, Jr., Surface Combustion Corp., Detroit, Michigan, opened the afternoon session by discussing "Recirculating Air Heating for Industrial Furnaces" from the standpoints of the job it does and

ently the most successful, that throttling type control is best, and that single valve control of burners is desirable.

The two technical papers next abstracted concerned "Luminous Flame and Its Applications" and "Reducing Atmospheres from the Combustion of Industrial Gas." The former by James E. Dare, Public Service Co. of Northern Illinois, Streator, Illinois, treated the theory, advantages, most frequent applications, available equipment, burner design, and control of luminous flame combustion. Although not a new practice, the application of luminous flame gas heating in steel, ceramic, and specialty fields has advanced sufficiently to warrant a progress report, and Mr. Dare's paper brought the subject up-to-date in a form both data-laden and understandable.

L. O. Howell, industrial engineer, A. G. A. Testing Laboratories, Cleveland, reviewed the Laboratories' researches to date on the subject of reducing furnace atmospheres and indicated the type of results which will be forthcoming as the work progresses. He showed curves on special test furnace setups from which, when extended, it should

present a convincing example of his dramatizations to employees of industrial gas utilization in Columbus.

Potential Market for 24,000,000,000 Feet—in Industrial Finishing

Paul J. Ziegelbaur, Pontiac Varnish Co., Pontiac, Michigan, reopened the technical phase of the conference with an enthusiastic endorsement of gas drying for lacquers, japans, and other metal finishes. "Recirculation heating with gas should be employed to the fullest extent," said he.

As a technical expert in the finishing field, Mr. Ziegelbaur proved invalid "every argument that has been advanced by paint men against the use of the recirculating heater." He indicated that finishing costs can be pared down surprisingly by its application. "It is the most nearly trouble-free combination yet found for the heating of ovens. Maintenance costs are lower than with any other heating method. For example, one Detroit plant reports an annual saving of over \$8,000 on upkeep alone since replacing oil with gas-fired recirculating heaters."



The rotating panel discussions were the hit of the conference. Above is the Industrial and Commercial Air Conditioning Group in action. At left is the Ferrous Metals table

the way it should be applied. "If the requirements are fast heating, high thermal efficiencies and smaller chambers, then the convection furnace is the answer; for accurate temperature distribution and complete uniformity, only the convection unit will do," observed Mr. Stephenson in referring to heating jobs up to about 1250° F. For quick changes of temperature, also, the method is ideal.

In regard to trends and desirable methods in convection-heated gas furnace construction he observed that the tendency is toward steel furnace structures and greater portability; that, although almost any type of conveying or loading mechanism is suitable, it is fundamental to keep the weight of mechanism which must be heated down to a minimum; that heaters of the totally enclosed type are preferable; that fans of the radial or paddle-wheel type are appar-

be possible to predict and control atmosphere conditions within a furnace from calculations based on furnace design and operating data. He also indicated how forthcoming information might indicate what furnace atmospheres can be obtained by the combustion of industrial gas.

Make Whole Company a Sales Force

Injecting a practical idea to wind up the first day of addresses, Franklin T. Rainey, The Ohio Fuel Gas Co., Columbus, Ohio, outlined the success he has enjoyed in "Stimulating Employee Interest in Industrial Gas Business." Two new jobs of sizeable proportions recently were won in his territory definitely through the stimulated interest inspired in employees not in any way connected with the industrial department. To illustrate his formula he pre-

As for the market, Mr. Ziegelbaur noted that the annual U. S. production of primers, lacquers, enamels and japans that are baked or force dried is between 200,000,000 and 300,000,000 gallons. If all this were dried in gas-heated ovens, the annual gas consumption would amount to more than 24,000,000,000 cu.ft. of 530 B.t.u. gas.

Controlled Atmosphere?—Beware Moisture

Returning to the subject of controlled atmospheres, Dr. Bruce W. Gonser, Battelle Memorial Institute, presented the fruits of his investigations and study on "The Present Status of Prepared Atmospheres in Industrial Heating." Current practice can be broken down into seven classifications of methods for preventing undesirable attack (principally scaling and decarburization) of heated materials. These classifications were defined and the methods described, charts and research findings being employed to evaluate the effectiveness and merits of each group. "Water vapor in the furnace atmosphere is the principal trouble-maker in prac-

tical applications," cautioned Dr. Gonser. In conclusion, he showed typical gas generating equipment of different kinds.

"Gas for ALL Heating Jobs"

J. Lundgaard, Rochester Gas & Electric Corp., Rochester, N. Y., offered views on "Selling Industrial Gas—and at a Profit." Dominant suggestions were that the industrial gas salesman keep his eye on *net* load value rather than estimated annual revenue, and that gas-saving engineering such as recuperation or regeneration be sold to the customer for his and ultimately the gas industry's permanent benefit.

Future progress will be more controlled by the thoroughness with which we sell old customers, Mr. Lundgaard indicated, than by the finding of new customers. Selling gas for every heating job in a customer's plant is one key to success. He recommended the industrial sales slogan, "Gas for ALL Heating Jobs."

Multiplying Sales Results

"Your best sales aid is a satisfied customer," admonished W. H. Eisenman, sec-

retary, American Society for Metals, Cleveland, winding up the parade of formal addresses; "Your next is advertising (and read it yourself), and your third is meetings and conventions." In "Getting the Most from Outside Sales Aids," you must make all three an issue in your program. He advocated strong discouragement of customers who want to build their own equipment, and offered a ten-point creed for industrial gas sales managers to follow by way of multiplying their department's effectiveness.

Speeches and the rotating panel discussions were not the sole diet for industrial gas men at the Cleveland conference. After luncheon on the second day, the all-technicolor movie, "Steel," was shown through the courtesy of the U. S. Steel Corporation. Its dramatization of the manufacturing activities of one of industrial gas' biggest customers was more than entertainment, it was inspiration and a heroic illustration of the basic role of industrial heat in making the world of today.

GOING AHEAD with Industrial Gas

Tom Gallagher is treasurer of the Chicago Restaurant Purveyors Association. Tom never loses a bet in keeping in touch with every group of his customers.

The Cincinnati Gas & Electric Company is running a fine series of industrial gas window displays in their main office. All the big-name plants in the territory are interested, and E. R. Rothery says his hardest job is to make monthly selections from among the firms who are anxious to cooperate.

The swarm of publicity for industrial gas in outside trade and business magazines that followed the Cleveland Industrial Gas Sales Conference is a "plus value" the industry received from the excellent papers presented.

A gas water heater has just replaced an electric water heater to furnish the 200 gal. of hot water required each 8 hours for serving tea to miners at the end of their shift, at Australia's Zinc Corporation's Mine. How about you industrial men in the mining towns drumming up some of that kind of business?

Dick Reeves' Gas Engine Power Committee is on the home stretch in whipping the Gas Engine Manual into shape for publication. Most of the work was done by C. Remschel of Southern Counties Gas Co., Los Angeles, Cal., who certainly knows his engines.

Frank Herty's industrial gas gang, and their manufacturer friends, set the pace at the recent Brooklyn Union new business party. They are still looking for the guy who hung a sign in their box reading "INDUSTRIAL GAS N-G-NEARS."

Look out for a blast of data when Clayton Cronkright's Ferrous Metals Committee reports. Subcommittee Chairman, George O'Neill of York, Pa. and Carl Wierum of Brooklyn, N. Y. have had their groups working hard getting the real low-down on furnace atmospheres and gas cutting.

Several things have been noticed recently which point toward more new large bakery ovens being equipped for gas heating this year. As an instance, one prominent manufacturer who makes ovens for all fuels is advertising, "The advantages of gas as a fuel are so obvious, due to its cleanliness and economy, that it should be the baker's first choice unless local conditions favor the use of other fuels. In most communities, however, public utility companies offer attractive commercial gas rates." It is an encouraging trend.

Hotel, Restaurant, and Commercial Gas Load Builders To Meet May 22-23

OUT to "Make It Boom Times for Commercial Gas Sales" the Industrial Gas Section of the American Gas Association announces its 1939 Conference on Hotel, Restaurant and Commercial Gas Sales. The Hotel St. George, Brooklyn, N. Y., has been selected as the place; and Monday and Tuesday, May 22 and 23, have been set aside as the dates. Frank B. Herty, vice-chairman, Program and Arrangements Committee is organizing the program.

The possibilities for gas and gas-using equipment in the beauty-shop field will be handled by a special symposium. In this manner the diverse opinions regarding gas hair dryers and related equipment will be brought before those attending the conference.

Featured luncheon speaker will be Clifford E. Paige, president, The Brooklyn Union Gas Company; while R. J. Rutherford, vice-president, Worcester (Mass.) Gas Light Co., and president, New England Gas Association—one of the most aggressive and original sales executives in the country—will close the conference on the theme "The Where and How of Future Commercial Gas Sales." Other prominent gas industry executives are slated for rounding out management's participation in the program.

Outside viewpoints and worthwhile advice are anticipated from Peter G. Pirrie, editor, *Bakers Weekly*, and W. D. Tiedeman, chief, Bureau of Milk Sanitation, State of New York. Mr. Pirrie, one of the country's outstanding authorities on bakery operations and equipment, will undertake to tell gas men what routes to follow in "Selling the Baker" to his and the gas industry's mutual advantage. Mr. Tiedeman

represents the State bureau which has jurisdiction over the administration of the New York sanitation laws pertaining to public eating places. He will talk on the objectives and administrative methods involved in these laws—especial emphasis being laid upon the sterilization of glassware, chinaware and silverware in restaurants, hotels and institutions.

Manufacturers of commercial gas appliances will have their say through Arnold E. Schwarz, sales promotion and advertising, The Bryant Heater Company; W. D. Crouch, manager, commercial and industrial division, Robertshaw Thermostat Co., and R. S. Agee, sales promotion manager, Association of Gas Appliance and Equipment Manufacturers. Mr. Schwarz will discuss up-to-date ways and means of "Selling Gas Heating to Main Street"; Mr. Crouch aims at pointing a way to increased sales by taking full advantage of the possibilities offered by modern gas appliance controls; and Mr. Agee expects to analyze how "The Manufacturers View Hotel, Restaurant, and Commercial Equipment Sales."

The army on the commercial sales firing-line for utility companies will be represented through H. A. Sutton, Public Service Electric & Gas Co., Newark, N. J., and Roy P. Wilson, The Philadelphia Gas Works Co. The fruit of a great company's experience in "Making the Most of Salesmen's Time" in both metropolitan and small communities, will be Mr. Sutton's contribution; while Mr. Wilson, who chairs the Section's 1939 Commercial Refrigeration Committee, will get down to cases on "Penetrating the Commercial Refrigeration Market."



Technical SECTION

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A. M. BEEBEE, *Vice-Chairman*
H. W. HARTMAN, *Secretary*

Vital Problems in Production and Chemical Fields To Be Clarified at Conference



F. B. Parke

The outstanding event of the year for those engaged in the production and chemical fields, the conference affords an opportunity for a mutual exchange of experience and information. Papers to be presented cover a wide variety of subjects, representing the latest developments in the industry. Most of these papers cover the experiences of individual companies and the conference will be a clearing house of information on many subjects vitally important to the gas industry.

F. B. Parke, The Brooklyn Union Gas Company, Brooklyn, N. Y., is chairman of the Production Committee and has directed the preparation of that part of the program. The Chemical Committee program was arranged under the direction of E. M. Bliss, Public Service Electric and Gas Co., Harrison, N. J., chairman of the committee.

Luncheon Conference

One of the most popular features of the conference is expected to be the series of roundtable luncheon meetings which will be held the opening day of the conference. These will cover the following subjects: Coal Carbonization and By-Products, Water Gas Operation, and How Can the Chemist Help the Operating Engineer. No stenographic record of the discussion will be kept and a frank exchange of views will be encouraged.

Immediately following the Tuesday morning session, the delegates will be transported to the Oak Hill Country Club which will be the scene of activities for the remainder of the day. This club occupies a

* Where advance information has been furnished, a brief summary of the scope of each paper has been included.—Editor.

† The times noted in this program refer to Daylight Saving Time.

beautiful site six and one-half miles from convention headquarters. It has one of the finest layouts of its kind anywhere, representing an investment of more than a million dollars. Two excellent eighteen-hole golf courses are available as well as facilities for tennis, quoits, handball, and softball. The spacious English manor clubhouse, besides furnishing facilities for the afternoon meeting, is also amply equipped for those who enjoy indoor sports, such as bridge, table tennis, nineteenth hole activities, and informal get-togethers.

A real surprise is in store for the delegates following the dinner Tuesday evening. Special entertainment will be furnished through the courtesy of the Rochester Gas and Electric Corporation.

But the meat of the conference will be found in the regular business sessions, and here's the detailed program:*

MONDAY, MAY 22, 10:00 A.M.†

Opening Remarks, F. B. Parke, Chairman, Gas Production Committee, Brooklyn, N. Y.
Welcome to Rochester, Herman Russell, President, Rochester Gas & Electric Corp., Rochester, N. Y.

Cooling Down and Reheating of Twelve Batteries of Koppers Ovens at Clairton By-Product Coke Works, H. W. Seyler, Carnegie Steel Co., Clairton, Pa.

Actual experiences in shutting down and starting up several batteries of ovens at the Clairton Coke plant will be described in detail in this paper. During the discussion, L. E. Knowlton will review the enforced shutdown and the speedy resumption of coke oven operation during the recent flood in Providence, and will present other data he has compiled on this subject.

Summer Air Conditioning, W. F. Friend, Ebasco Services, Inc., New York, N. Y.

Light Oil Scrubbing for Gum Formers, S. Green, The Brooklyn Union Gas Co., Brooklyn, N. Y.

An interesting description is given in this paper of the removal and recovery of the gum forming light oils present in the water gas manufactured at the Citizens Works. The manner in which existing plant equipment was adapted to accomplish this result is related, and the economics of light oil recovery at this particular plant is discussed.



E. M. Bliss

Report of Gas Conditioning Committee, O. S. Hagerman, Chairman, Atlantic Seaboard Corp., New York, N. Y.

ROUND TABLE

ROUND TABLE LUNCHEON CONFERENCES 1:00 P.M.

1. Coal Carbonization and By-Products.
2. Water Gas Operation.
3. How Can the Chemist Help the Operating Engineer.

TUESDAY, MAY 23, 9:30 A.M.

Opening Remarks, E. M. Bliss, Chairman, Chemical Committee, Harrison, N. J.

The Results of Some Corrosion Tests of Metals and Alloys in the By-Product Coke Industry, O. B. J. Fraser and G. L. Cox, International Nickel Co., Inc., New York, N. Y.

Tar Handling and Treatment, K. B. Weber, Consolidated Edison Co. of New York, Inc., New York, N. Y.

A complete description of a modern tar handling and treatment system in connection with heavy oil operation is given by the author. The dehydration of heavy tar emulsions is always a subject of deep interest to water gas operators.

Oak Hill Country
Club, Rochester,





An outstanding success, the Distribution Conference in Chicago, April 17-19, attracted a national audience. Shown here are, left to right: Charles F. Turner, of Cleveland, chairman of the conference; F. M. Goodwin, Boston, chairman, Technical Section; C. J. Gregg, Bradford; Alexander Forward, managing director, American Gas Association, and George F. Mitchell, president, The Peoples Gas Light & Coke Co., Chicago

Composition of Flue Gas After Combustion with Insufficient Air, L. O. Howell, A. G. A. Testing Laboratories, Cleveland, Ohio.

OAK HILL COUNTRY CLUB
Rochester, N. Y., 1:30 P.M.

Refractories for By-Product Coke Ovens, W. C. Rueckel, Battelle Memorial Institute, Columbus, Ohio.

Some new and significant data has been obtained through studies made at the Battelle Memorial Institute on the subject of Silica brickwork and its care. The paper presenting this data should prove of particular interest to coke oven operators.

A Note on the Wetting of Iron Oxide Samples Before Testing, Dr. Frank H. Dotterweich, Texas College of Arts and Industries, Kingsville, Texas, and Prof. Wilbert J. Huff, University of Maryland, College Park, Md.

Practical Control Methods for Operation of Gas Purifiers, E. L. Sweeney, Boston Consolidated Gas Co., Boston, Mass.

Specific Gravity Recorder, R. L. Ellis, Florida Power & Light Co., Miami, Fla.

At the adjournment of this session the delegates will have an opportunity to avail themselves of the golf and other recreational facilities at the Oak Hill Country Club, and in the evening a special entertainment has been provided by the Rochester Gas and Electric Corporation. Read your copy of "Information for Delegates" for full information.

WEDNESDAY, MAY 24, 10:00 A.M.

Coal Gas Manufacture, M. D. Curran, Coal Carbonizing Co., and Radiant Fuel Corp., St. Louis, Mo.

This paper will present some further interesting information on this new type of oven which has been offered for converting low grade coals and coals ordinarily considered non-coking into coke suitable for domestic or water gas purposes. It will explain why these ovens can use swelling coals without difficulty and without the necessity of mixing with other coals.

Heavy Oil Operation, John Dopp, Wisconsin Power & Light Co., Fond du Lac, Wis.

Distribution Conference Attracts 450

More than 450 delegates registered for the sixteenth annual Distribution Conference which on April 19 concluded a highly successful three-day meeting at the Palmer House, Chicago, Illinois. A significant feature of the attendance was the representation of companies from distant points, signifying national interest in this specialized meeting sponsored by the Technical Section of the American Gas Association. Interest-packed papers on a score of subjects brought out the latest developments in the distribution field.

Under the capable direction of Charles F. Turner, chairman of the Distribution Committee, the meeting

sharply focussed attention on the distribution engineer's problems and brought forth a free exchange of information on many local problems as well as those on the formal program. Particularly was this true of the popular round-table luncheon conferences which were devoted to the following four subjects: Construction, Maintenance, Installation and Servicing, Meters and Metering.

Reproduced in this issue of the MONTHLY is an important contribution on Appliance Servicing by T. J. Perry, The Brooklyn Union Gas Company. Other papers will be discussed in the June issue.

This paper treats with the use of heavy oil for enrichment in combination with 100% bituminous coal as generator fuel. It presents complete figures on operation and costs in connection with such operation on a reverse flow machine. In view of the interest shown in recent years in the reverse flow set, this paper should provoke considerable discussion.

Expansion of Coal Under Coking Conditions, J. D. Davis, U. S. Bureau of Mines, Pittsburgh, Pa.

Another fine contribution covering the experimental work on expansion of coal under coking conditions, conducted by the Bureau of Mines, will be presented under this heading.

On the Determination of Water Vapor in Gaseous Fuels, Dr. A. W. Gauger, F. C. Todd and C. C. Haworth, The Pennsylvania State College, State College, Pa.

Steam Generation from Pulverized Coke Breeze, Irving McChesney, Rochester Gas & Electric Corp., Rochester, N. Y.

The application of pulverized fuel boilers for the burning of coke breeze should prove a subject of considerable interest to

those of us charged with the responsibility of steam generation. This paper will describe the breeze boiler installation at Rochester.

2:00 P.M.

Mechanism for Recording the Combustion Characteristics of Gas, A. R. T. Denes and Prof. Wilbert J. Huff, University of Maryland, College Park, Md.

Pipe Line Protection Advance Reported

AN improved method of protecting the huge investment in the country's underground pipe line systems conveying gas, oil, and water by making it easier to arrest corrosion damage, has been developed by Dr. Scott Ewing, American Gas Association research associate at the National Bureau of Standards.

A patent covering the development is being applied for, and the American Gas Association has arranged to have it dedicated to the free use of all American industry, municipal water works systems and the Government.

Millions of dollars are lost annually through the corrosion of underground pipe lines. One of the principal causes of this corrosion is the presence of stray electric currents in the soil. "Cathodic Protection" guards against the effects of these stray currents by setting up opposing currents. To do this successfully, it is necessary to measure the changes in voltage or potentials which cause the stray currents in the soil. This is done by means of an electrode driven into the ground, similar to a ground connection used with a radio.

The electrodes which have been used for this purpose have introduced considerable errors owing to differences between individual electrodes, to polarization, and to the effect of temperature variations.

During the past six months, Dr. Scott Ewing, American Gas Association Research Associate at the National Bureau of Standards, has been investigating the characteristics of these electrodes. He has developed several new types which permit more accurate measurements of voltages in the soil. These new electrodes will make it much easier to establish the proper conditions for protecting underground pipe lines.

A complete report was presented by Dr. Ewing at the American Gas Association's Distribution Conference held in Chicago, April 17, 18 and 19.

SALES SYMPOSIUM

(Continued from page 177)

- effort and maintain the highest standard of quality in gas appliances sold by all outlets. The company must also aggressively merchandise new appliances and equipment, such as gas air conditioning, automatic vented gas heating, CP gas range, during the promotional and development stage to secure wide public acceptance and stimulate the market for such appliances and equipment.
- plans to cooperate with manufacturer and distributor to create and develop outlets for gas appliance and equipment.
- maintaining an open market for the sale of gas appliances and equipment.
- making available to the dealer pertinent information relative to the market available for sales of gas appliances.
- assisting the dealers to obtain or prepare sales aids such as handbooks, sales manuals, general promotional literature, suggested window and store displays.
- assisting dealers in obtaining and using adequate sales training material.
- preparation of dealer sales campaigns to coordinate sales activities on a mass selling basis.
- securing proper and adequate reports of dealer sales of gas appliances and equipment.
- preparation and distribution of a monthly sales bulletin giving overall sales results and information of general interest to dealers and other sales allies.
- supplying dealers with an advance schedule of our advertising for the month with proof of ads in order for them to coordinate their advertising with ours.

- conducting periodic general dealer sales meetings for the purpose of introducing general sales programs.
- making available to dealers the services of our staff of trained home economists for conducting store demonstrations and cooking schools.
- supplying dealers with lists of likely prospects for gas appliances.
- providing the services of three trained dealer contact men whose sole responsibility is to work with dealers and other sales allies in every way possible to insure successful operation of our dealer plan. These men were selected for our

dealer organization from the personnel of successful dealers and distributors and know dealer problems. They are responsible for the interpretation of company sales policies and sales activities to our sales allies to the end that a maximum volume of gas appliances and equipment may be secured with a corresponding increase in the sale of the company's natural gas service.

These policies have been in operation for the past five years and have been productive as indicated by the following tabulation of results:

Unit Sales of Gas Appliances	1935	1936	1937	1938
RANGES				
Company	2,715	3,254	3,110	1,457
Dealer	8,045	11,040	12,382	12,922
Total	10,760	14,294	15,492	14,379
REFRIGERATORS				
Company	1,748	1,705	1,286	372
Dealer	757	2,343	2,405	1,349
Total	2,505	4,048	3,691	1,721
WATER HEATERS				
Company	2,493	2,728	1,662	825
Dealer	3,721	5,397	6,929	7,799
Total	6,214	8,125	8,591	8,624
HEATING APPLIANCES				
Company	3,658	4,412	3,530	2,339
Dealer	9,647	14,401	22,868	19,690
Total	13,305	18,813	26,398	22,029
NET EARNINGS FROM UNIT SALES				
Company	\$ 68,680	\$ 103,528	\$ 87,452	\$ 47,704
Dealer	127,290	211,554	265,099	285,155
Total	\$ 195,970	\$ 315,082	\$ 352,551	\$ 332,859
TOTAL GROSS OPERATING REVENUES FROM GAS SALES				
	\$6,442,000	\$7,868,000	\$8,372,000	\$8,261,000

ACCOUNTING REGULATION

(Continued from page 189)

generating stations, substations, transmission lines, and distribution systems. The system of accounts provides that when operating units of systems are purchased, the original cost doctrine shall apply but it shall not apply to smaller units. . . .

"Thus, the purchase of a part interest in a few poles, or of a segment of a distribution line, could not come under the original cost rule without causing more trouble and expense than the result could possibly justify."

Some such flexibility and tolerance are necessary if the costs of establishing and maintaining Continuing Property Records are not to be prohibitive in terms of the worth of the result. In New Hampshire we believe that the result to date has been worth-while and that the cost has not been excessive. I have not before me a detailed break-down of costs as between those due to the original studies of Fixed Capital,

those involved in establishing the Continuing Property Records, and those occasioned by the Depreciation Studies. As might be expected, these aggregate costs varied considerably among the several companies. They ranged from \$40,000 for a small company having about \$2,300,000 of Fixed Capital to \$70,000 for our largest distributing company whose Fixed Capital totals nearly \$35,000,000. In this connection it may be significant that the Commission was rather lenient on its time requirements for completion when convinced that the work had been undertaken seriously and endeavored to permit it to be done as much as a routine operation and with as little special personnel as possible.

Costs of maintaining the record likewise vary widely. In the cases of representative properties they have ranged from a high of \$1.57 per \$1000 of Fixed Capital and 35 cents per meter, for a company having about two and one-quarter millions of Fixed Capital and less than 9,000 meters, to a low

of 34 cents per \$1000 of Fixed Capital and 16 cents per meter for a \$35,000,000 utility. Thus far we have no definite information as to the probable costs of setting up and operating the Continuing Property Records required of gas utilities. In view, however, of the more general availability of basic records and earlier valuations it is not expected that the costs will be higher.

As for the Commission, one member of the engineering staff devotes his full time to the records here under consideration, with some additional assistance available for checks in the field and appraisal work in the office. We do not anticipate that the additional work involved on the records of our few relatively small gas companies will add materially to this burden.

GAS IN INDUSTRY

(Continued from page 172)

In some operations, such as the heating of liquids in tanks, the gas is burned directly in the liquid, the products of combustion bubbling through and heating the liquid, and condensing the water vapor in the products of combustion, thereby helping replace the water lost from the tank through evaporation.

We think of gas only as producing fire, and yet by proper reforming, it is used in operations highly inflammable or explosive for actually preventing and eliminating fire.

It is used in furnaces no larger than a loaf of bread for the melting of precious metals, or in furnaces the size of a twenty-room house for the annealing of a complete gun turret of our most modern battleships.

You may be interested in the growth of the industrial business of your company. In 1932, industrial sales constituted 24 per cent of our entire sales, while now it constitutes 41 per cent of our entire sales, an increase of 71 per cent. You may be interested in knowing that some of our larger industrial customers use as much gas as the entire domestic load of a city the size of Toledo, Ohio, a city of approximately 300,000 people.

Nationally, 64 per cent of all the gas is used industrially through several thousand different types of applications. Together with the other 36 per cent supplied for the domestic use, this great gas industry of ours furnishes four times as much energy as the electric industry.

Yes sir, gas in industry is going places and doing things. It's a great business with a great future.

Requirements Distributed for Criticism

IN line with the industry's policy of keeping its standards for gas appliances and accessories up to date, extensive revisions in the requirements for the following types of appliances were recently completed by the interested subcommittees and published for criticism: domestic ranges, space heaters, central heating gas appliances, unit heaters, appliance thermostats, and automatic devices to prevent the escape of unburned gas.

It is expected that the interested subcommittees will, after reviewing the comments submitted, complete the revised requirements in time for presentation to the Approval Requirements Committee at the meeting of that group in June or July. The revised standards will probably become effective January 1, 1940.

The unit heater standards were almost completely revised and requirements were added to cover appliances for use with propane, butane and butane-air gases. While a number of changes were made in other standards for appliances and accessories, probably the most important were those to permit approval of equipment for use with undiluted butane and mixtures of butane and propane. It is possible under the revised requirements to secure approval on both propane and butane as well as mixtures of the two as a result of tests on butane only.

Thermostat requirements have been modified to cover all types of appliance heat

regulators, and in addition have been expanded to provide specifically for the listing of such accessories for use with liquefied petroleum gases. Similar changes have been made in the listing standards applying to automatic devices to prevent escape of unburned gas.

Standards for Floor Furnaces

THERE has been some confusion in the trade regarding flue temperature measurements in the testing of floor furnaces for approval. At a recent meeting of the Subcommittee on Approval Requirements for Central Heating Gas Appliances a method of test was added to the requirements which clarifies the situation. This was adopted for immediate application. The test procedure adopted definitely specifies the measurement of flue gas temperatures on the inlet side of the draft hood and with the outlet of the draft hood blocked. The temperature is limited to 530° F. above room temperature at this point.

In order to give broader representation with respect to floor furnaces on the central heating gas appliance committee, the addition of floor furnace manufacturers and an equal number of gas company men to this committee was recommended.

The subcommittee at its recent meeting also adopted a more stringent requirement with respect to tests for wall and floor temperatures on floor furnaces. These and other changes in the central heating requirements have recently been issued for distribution to the industry for criticism.

Personnel Service

SERVICES OFFERED

Sales promotion, merchandising and advertising manager gas appliances. Last effort increased business 30 per cent. Diversified, intensive experience in creating campaigns, sales literature, sales and merchandising plans. Eastern city. Modest salary. 1279.

Industrial, househeating, domestic sales or supervision, graduate engineer experienced in design, installation, selling industrial, househeating and domestic equipment. Had charge of training men and several years of experience in natural and manufactured gas territories. Desire connection with a utility, appliance manufacturer or dealer. 1280.

Gas Engineer, experienced in the design, construction, operation and valuation of manufactured and natural gas properties is open for permanent or temporary position. 1281.

Graduate Engineer, young, (B.C.E.) varied experience with large gas company doing flue analysis and maintenance work on all types of gas house heaters (steam, hot water, warm air). Also 4 years drafting and machine shop experience. Desires connection with reliable engineering organization offering opportunities for advancement. 1282.

Young man, married (28), well trained with several years' experience with both national manufacture and utility in promotional sales of automatic water heaters on jobber-dealer-utility setup, desires position with a utility or with a national manufacturer of gas appliances. Can travel, best references. 1283.

Twelve years' experience—industrial gas utilization—commercial hotel and restaurant sales work—manager thirty-seven thousand meter territory on domestic gas and electric appliance sales for large eastern utility. Prefer position as manufacturers representative or with small utility requiring a man experienced in all phases of gas sales. 1284.

SERVICES OFFERED

Wanted clerical or bookkeeping position. Seventeen years' experience with large metropolitan gas company. 1285.

Ten years' diversified sales financing experience. Qualified to promote or manage time-payment financing operations for gas and electric utilities; can develop sound finance plans for dealer sales; also supervise credit and collection operation; thoroughly familiar with sales methods in refrigeration, home appliance, heating equipment, air conditioning fields. 1286.

Seventeen years' important experience in large and small gas plant engineering—design, construction, development, estimating, selling and appraising. Responsible executive positions. Both manufactured and natural gas. Competent to take charge design, construction, appraisal or assist in operating supervision. Especially experienced in water gas plants. Now available. Will go anywhere in U. S. A. 1287.

A highly educated, broadly experienced and widely acquainted sales engineer who is exceptionally gas minded—a colorful, loyal personality who can really sell to public utilities and the heating trade. University graduate and a former artillery officer, twice decorated. A hard, intelligent worker in the field, available immediately. 1288.

POSITIONS OPEN

Superintendent of manufacture for a carbureted water gas plant having a capacity of 14,000,000 cu.ft. 24 hours. Desire a man between 35 and 45 years old with thorough training and experience in the construction and operation of large carbureted water gas plants. In answering this notice, please give employment and qualification record as completely as possible. 0340.

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